

*Thermal Label Printer*

# ***TSP828L***

## ***Software Manual***

***for Mac OS X***



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## Introduction

This printer driver supports Mac OS X v10.4 on Power PCs and Mac OS X v10.4/v10.5 on Intel Macs. 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.

## 1. Installation/Uninstallation Procedures

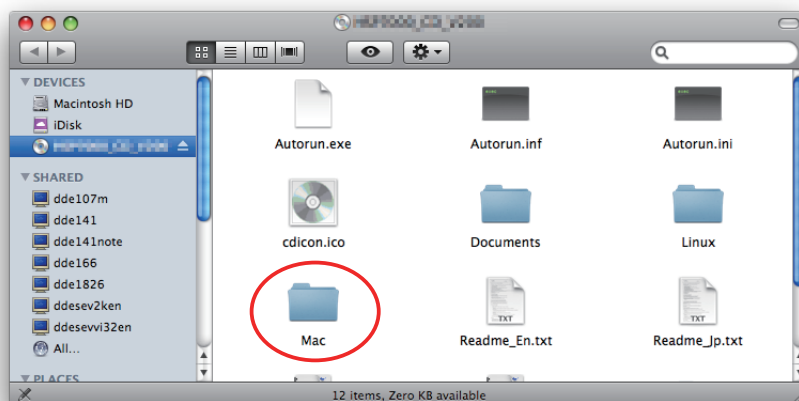
**Cautions :** The person with administrative privilege for the PC should install/uninstall this driver.

### 1.1 Installing Star Printer Drivers

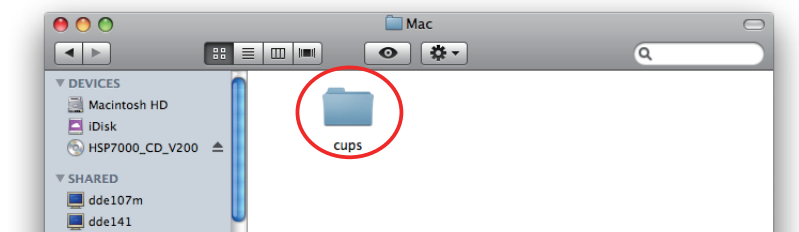
To install the driver, proceed as follows.

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

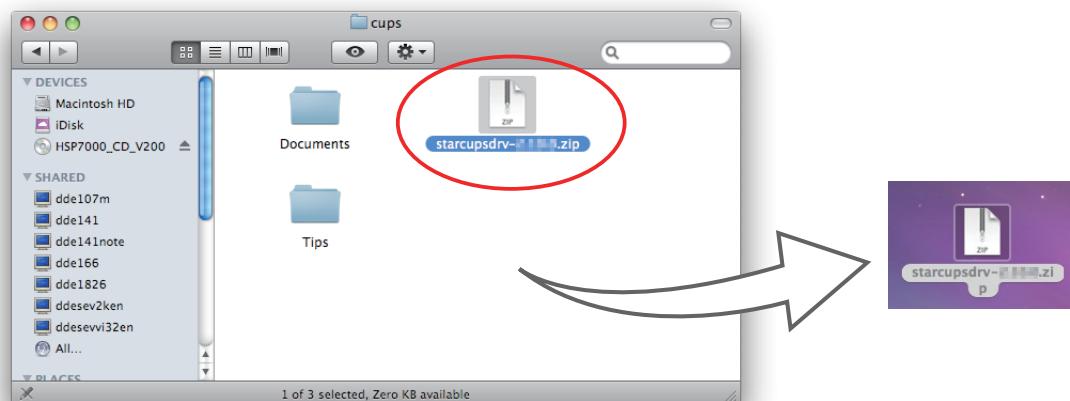
1. Place the CD-ROM that came with your printer in your PC CD-ROM tray.  
Double-click the CD-ROM icon to display the window shown below.  
Click on the "Mac" folder to open it.



2. The following window will open.  
Click on the "cups" folder to open it.



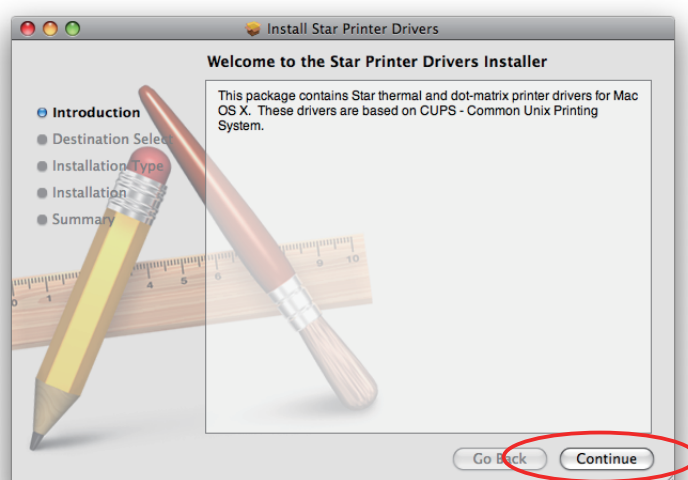
3. The following window will open.  
Copy the < starcupsdrv-x.xx.x. zip > to the desktop.



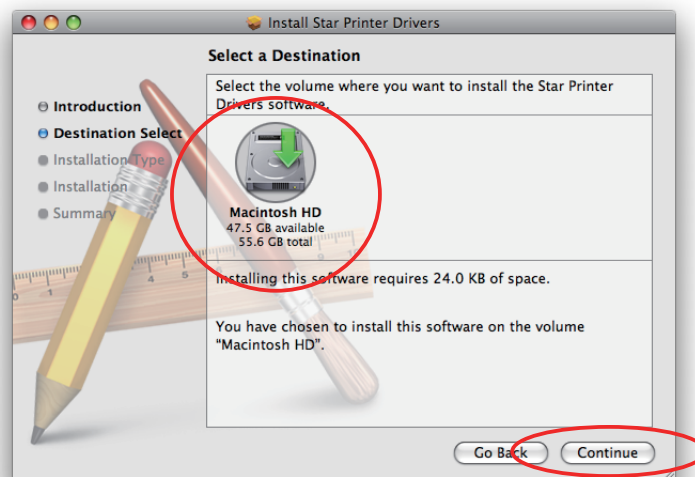
4. "starcupsdrv-x.xx.zip" will appear on the desktop. Double-click on the icon to open the program. Double-click on < starcupsdrv-x.xx.x > to start the installation.



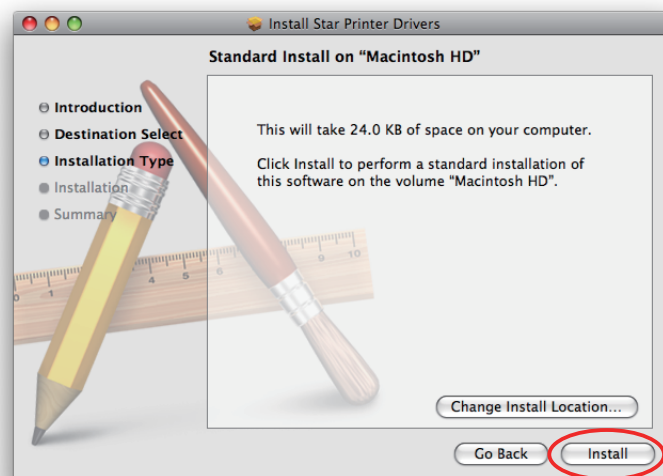
5. The following window is displayed.  
Click [ Continue ].



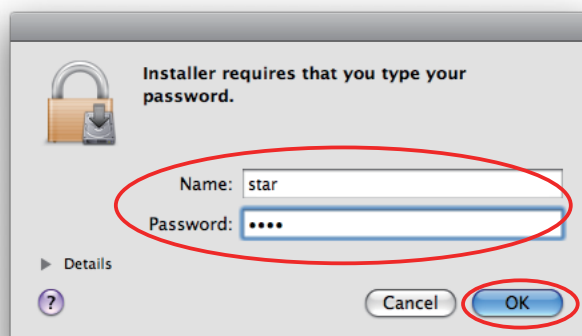
6. Select the harddisk to install with the program, then click [ Continue ].



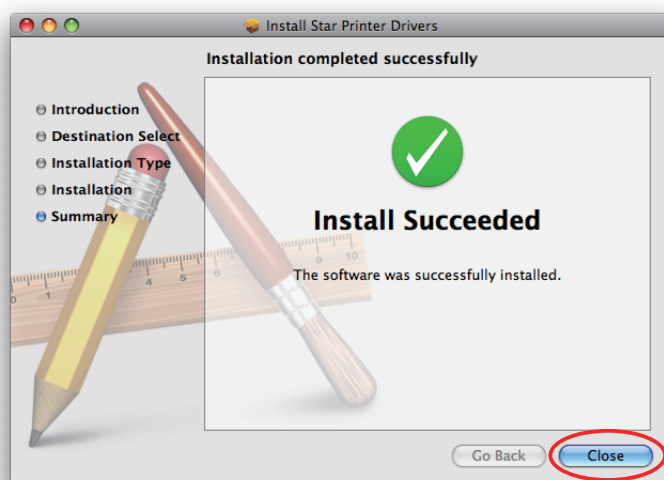
7. Click [ Install ] to start the installation.



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



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



## 1.2 Registering the Printer

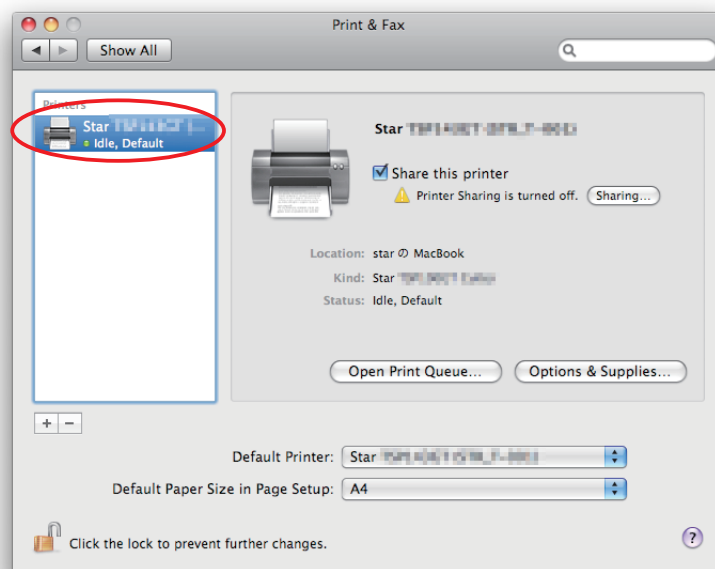
Procedures for registering the printer differ according to the type of interface you use. See the page relating to your environment.

### 1.2.1 When using a USB InterFace

1. In the Apple mark in the menu bar, open [System Preferences] and double-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.



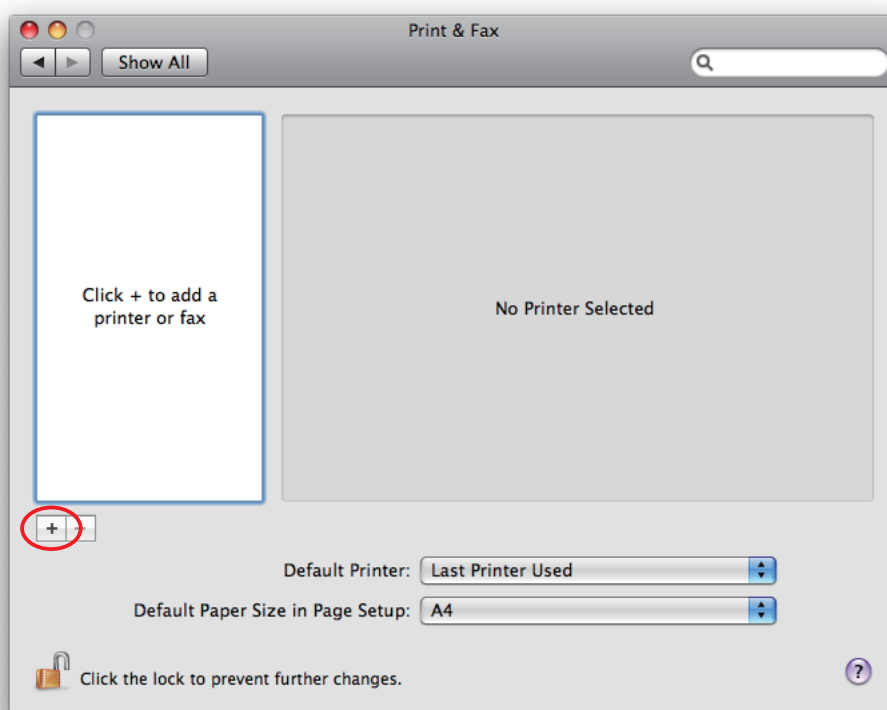


## 1.2.2 When using Ethernet Interface

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

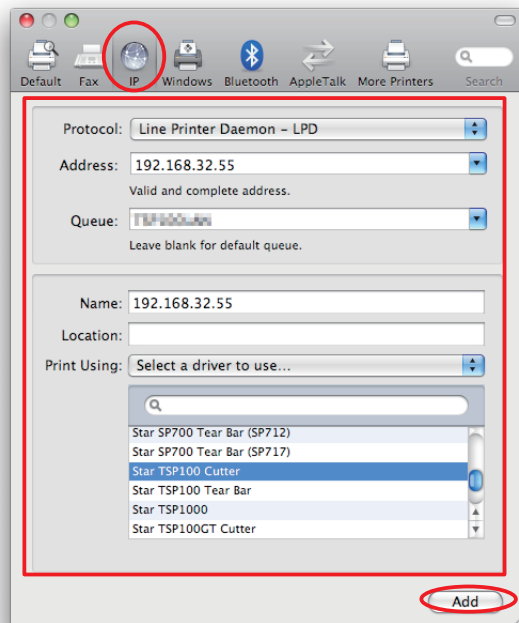


2. The Print & Fax window appears.  
Click on [+].



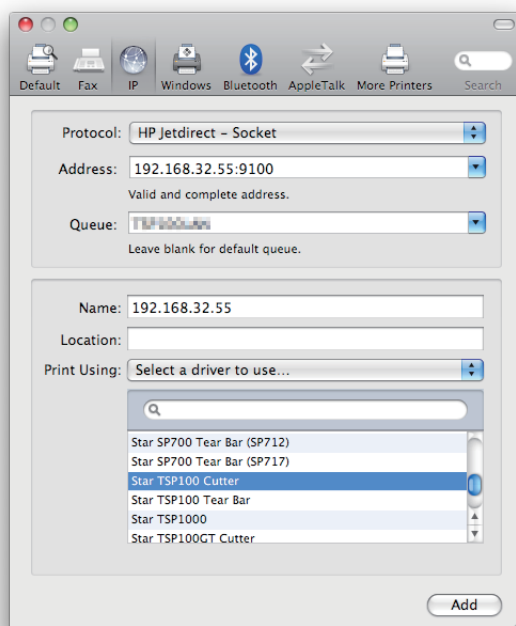
3. From the "IP" ( "IP Printer" on OS 10.4 ), make the following settings and click on [Add].

- 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. (Select "star" for OS 10.4.)

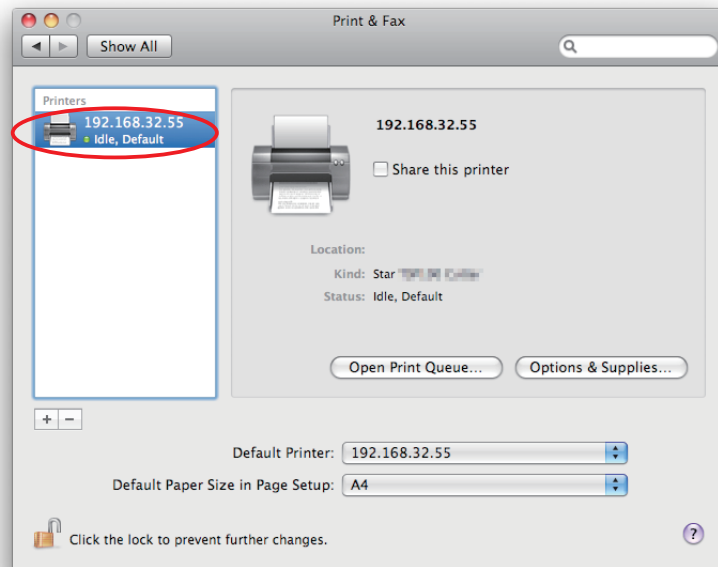


**Point!** When using port 9100, set the following.

- Protocol: HP Jet Direct - Socket
- Address: [ IP address of printer being set ] : 9100
- Print Using: Select the driver to use. (Select "star" for OS 10.4.)



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



## 1.3 Uninstalling Star Printer Drivers

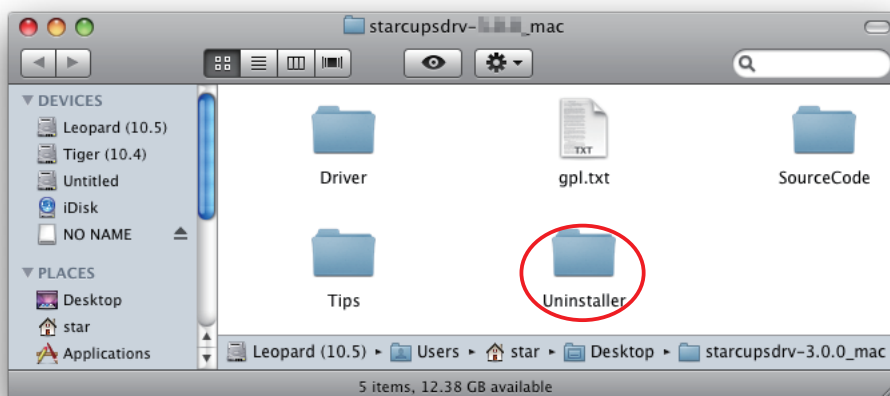
To uninstall the driver, proceed as follows.

**Important :** When you uninstall the Star Printer Driver, all drivers for Star Printers installed on your Macintosh computer are deleted.

1. Turn off the power switch of the Printer.
2. Double-click "CD:\Mac\cups\starcupsdrv-x.xx.x\_mac\_yyyymmdd.zip" you copied to your desktop to decompress it.



3. The screen below appears by double-clicking the expanded <starcupsdrv-x.xx.x\_mac> file. Double-click on the "Uninstaller" folder to open it.



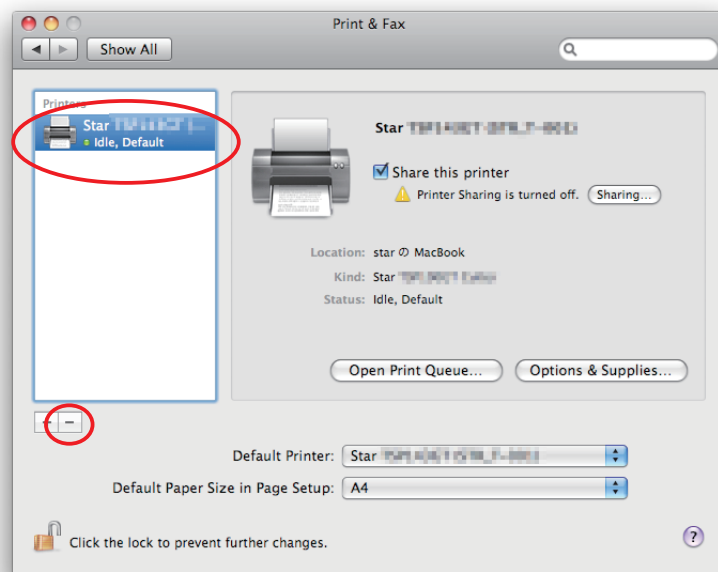
4. Copy "uninstaller.sh" to your home directory.



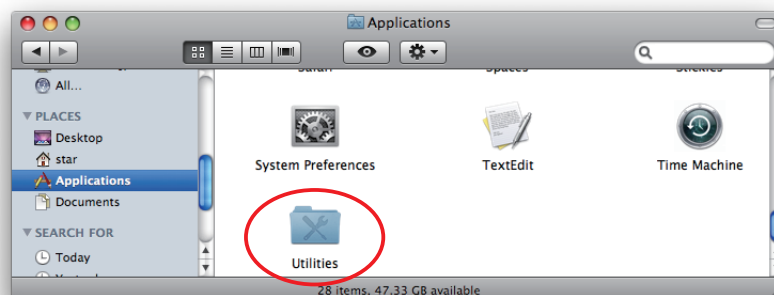
5. In the Apple mark in the menu bar, open [System Preferences] and double-click on the [Printer & Fax] icon.



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



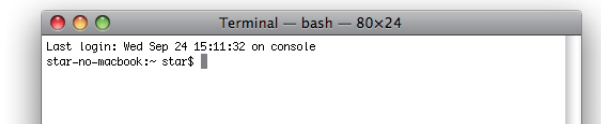
7. Startup the Finder from the Mac OS X Dock and double click [Applications] - [Utilities].



8. Double-click on [Terminal].

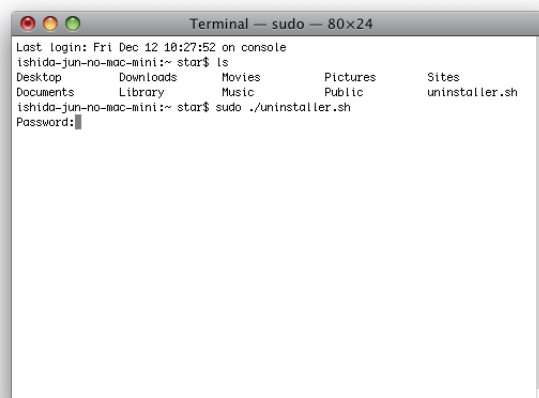


9. The terminal starts up.



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

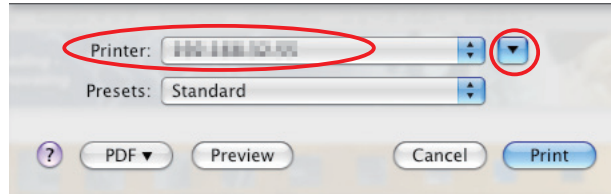
**sudo ./uninstaller.sh**



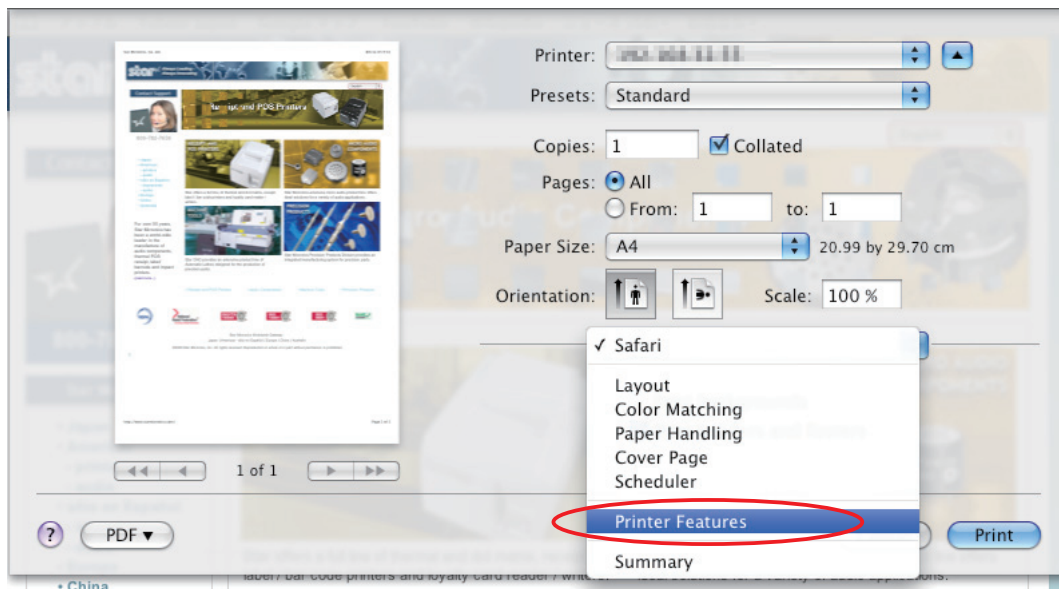
## 2. Setting the Printer Functions

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

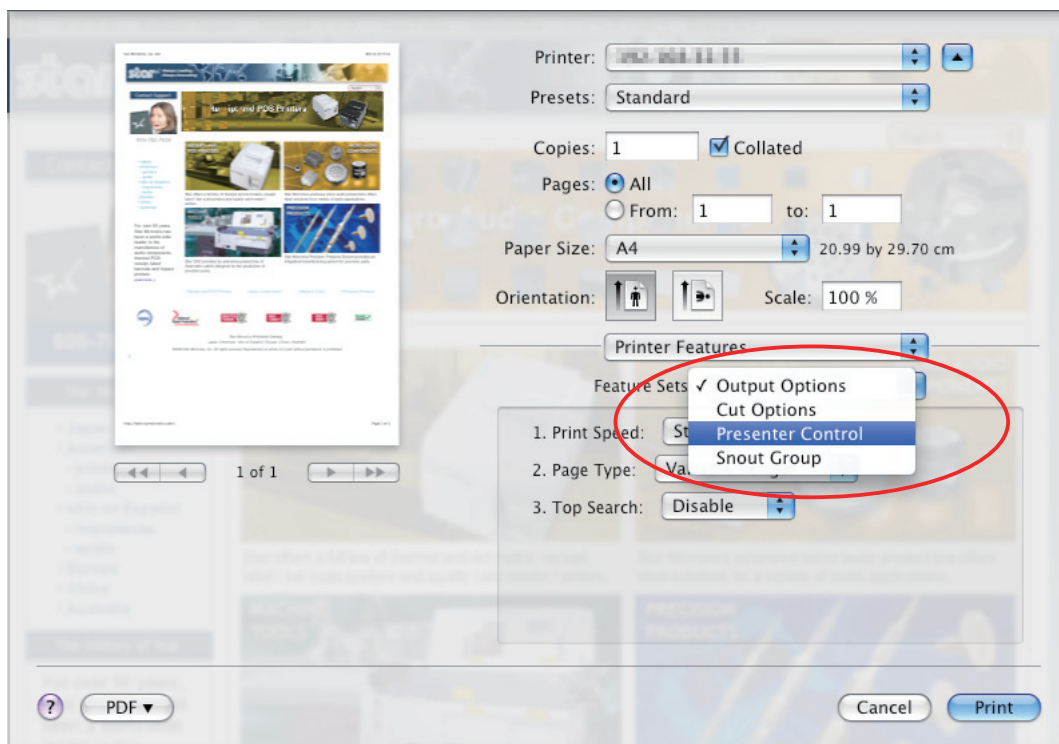
From the "Printer:" pull-down menu, select the printer name to set, then click [▼] to display the details.



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



"Feature Sets:" Selects function that makes settings.



## 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	<input type="radio"/>	Print quality has priority over speed.
Middle		Print quality and speed are in the middle.
Low		Best quality, but slow print speed.

#### • Page Type:

This sets the page type.

Setting	Default	Details
Variable Length	<input type="radio"/>	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.

### ◆ Output Options ( Extended )

#### • Media Type:

This sets the Media type.

Setting	Default	Details
Normal Paper		If you don't use Label paper or Black marked paper, this option should be selected.
Label Paper	<input type="radio"/>	If you use any Label paper or Black marked paper, this option should be selected.

#### • Label Detect at Power On:

If the printer's DIP switches 1-8 are set to OFF (normal mode), the *Media Type* is set to **Label Paper**, and this feature is set to **Enable**, the first time you print after you turn on the power or after you set the *Media Type* to **Label Paper**, the printer will feed the paper to the top position of the label on the next page if the paper in the printer is in the middle of a label.

This action is only available when *Media Type* is set to **Label Paper**.

Setting	Default	Details
Disable	<input type="radio"/>	On the first printing, the printer does not feed the paper by detecting the label position.
Enable		On the first printing, the printer feed the paper by detecting the label position.

**Point!** If you set the printer's DIP switches 1-8 to ON (Label mode; the factory default setting), the printer always detects the label position.  
For information about the printer's DIP switches, refer to the Product Specifications Manual (issued separately).



• **Print Density:**

This sets the printing Density.

Setting	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.

## ◆ Feed Options

• **Page Feed Type:**

This sets the paper feed method for the end of all pages, excluding the last page.

When the printer is set to use the Peel Mode, paper is fed regardless of the Page Feed Type settings.

Setting	Default	Details
No Feed		The paper feed operation is not performed.
Peeler(Tear Bar)	○	Paper is fed to the tear bar (cutting position).

• **Document Feed Type:**

This sets the paper feed method for the last page.

When the printer is set to use the Peel Mode, paper is fed regardless of the Document Feed Type settings.

Setting	Default	Details
No Feed		The paper feed operation is not performed.
Peeler(Tear Bar)	○	Paper is fed to the tear bar (cutting position).

**Point!** Refer to the separate Hardware Manual for the setting of the peel mode.

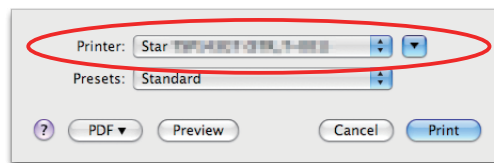
## 3. Setting the Paper Size

### 3.1 Setting the Paper Size

With OS X v10.5 from the menu bar on Mac OS X, open [File] - [Printers], and on OS X v10.4, open [File] - [Page Setup].

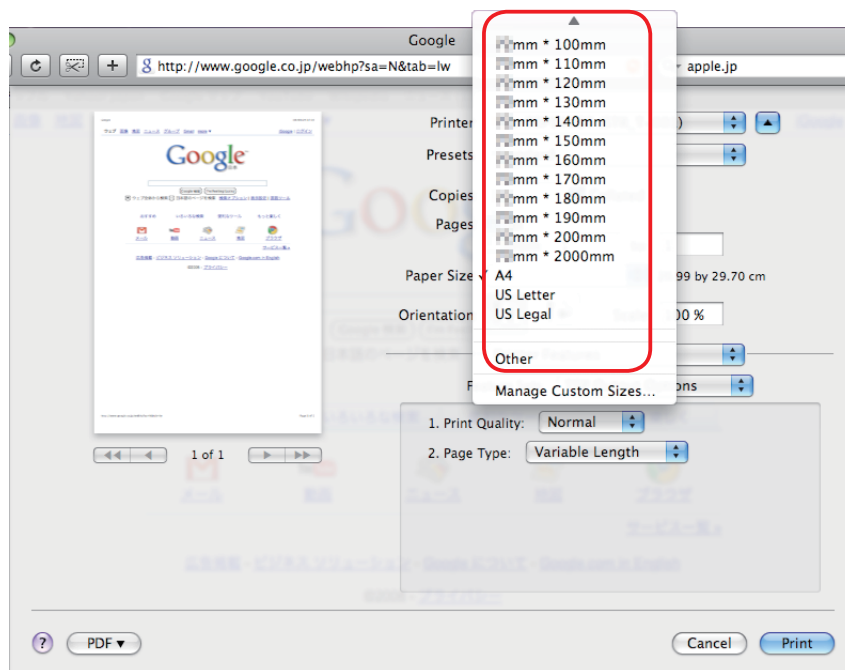
Select the printer to set from the "Printer:" ("Format for:" on OS X v10.4) pull-down menu.

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.

## 3.2 Settable Paper Sizes

The following paper sizes are available and can be set.

Paper Size	Default setting value ( ● )
104 * 30mm	<input type="radio"/>
104 * 40mm	<input type="radio"/>
104 * 50mm	<input type="radio"/>
104 * 60mm	<input type="radio"/>
104 * 70mm	<input type="radio"/>
104 * 80mm	<input type="radio"/>
104 * 90mm	<input type="radio"/>
104 * 100mm	<input type="radio"/>
104 * 110mm	<input type="radio"/>
104 * 120mm	<input type="radio"/>
104 * 130mm	<input type="radio"/>
104 * 140mm	<input type="radio"/>
104 * 150mm	<input type="radio"/>
104 * 160mm	<input type="radio"/>
104 * 170mm	<input type="radio"/>
104 * 180mm	<input type="radio"/>
104 * 190mm	<input type="radio"/>
104 * 200mm	<input checked="" type="radio"/>
104 * 2000mm	<input type="radio"/>
A4	<input type="radio"/>
Letter	<input type="radio"/>
Legal	<input type="radio"/>

\* ● is the default setting value.

In some cases, they won't function depending on the application being used.

## 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.

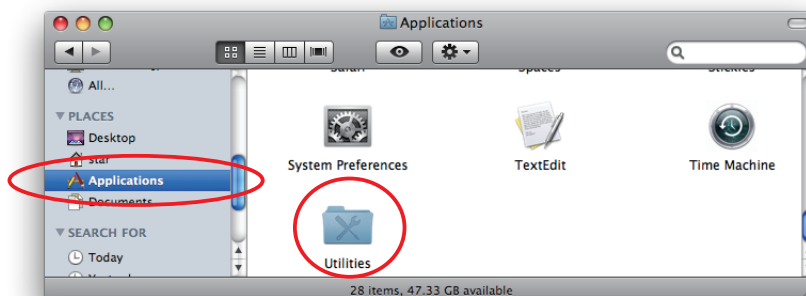
### 4.1 Setting a Temporary IP Address

Use the following procedures to set a temporary IP address to the printer. By setting a temporary IP address, it is possible to connect to a printer that has not been set with an IP address.

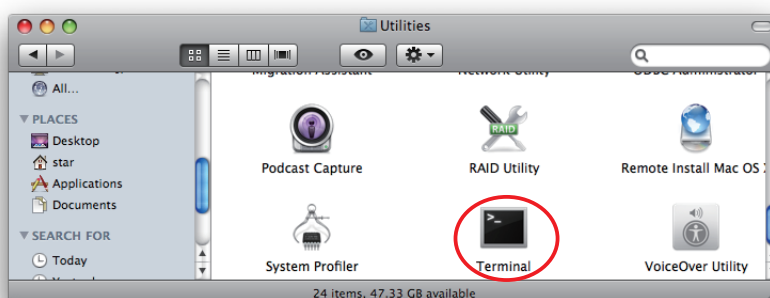
**Important:** Printer settings should be done by a user with administrator rights.

**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.

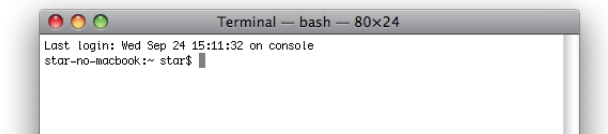
1. Connect the Ethernet cable to the printer and turn the power ON to the printer.
2. Startup the Finder from the Mac OS X Dock and double click [Applications] - [Utilities].



3. Double-click on [Terminal].



4. 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)*

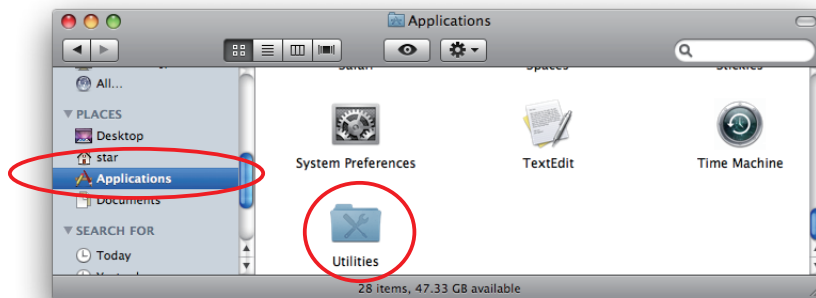
```
sudo arp -d 192.168.222.217
sudo arp -s 192.168.222.217 00:11:62:00:03:4D
ping -c 4 192.168.222.217
sudo arp -d 192.168.222.217
```

**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. )

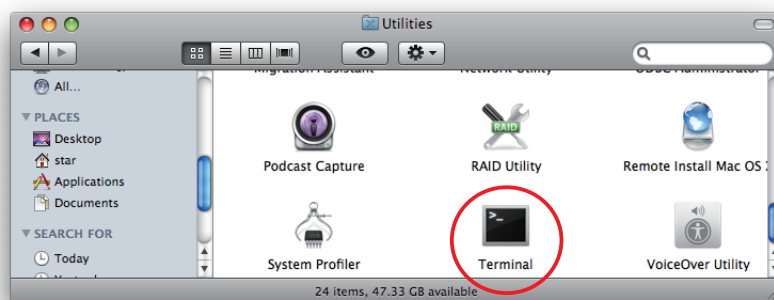
## 4.2 Setting the IP Address << StarPrinter TELNET Utility >>

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

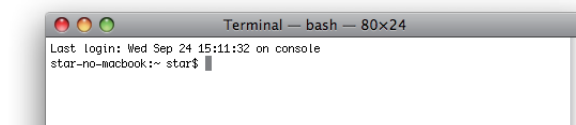
1. Connect the Ethernet cable to the printer and turn the power ON to the printer.
2. Startup the Finder from the Mac OS X Dock, and double click [Applications] - [Utilities].



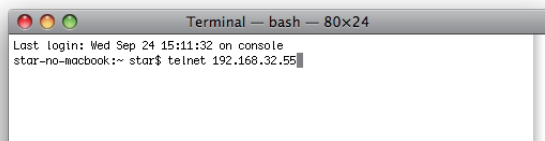
3. Double-click on [Terminal].



4. The terminal starts up.



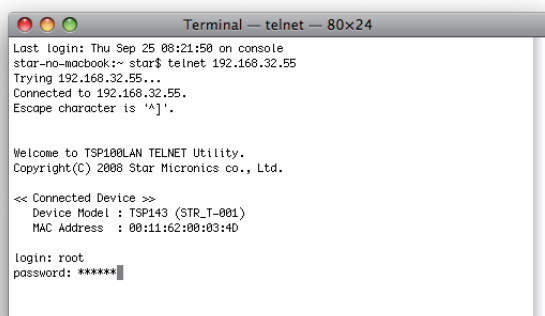
5. Use the Telnet command to connect to the printer to set.



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.

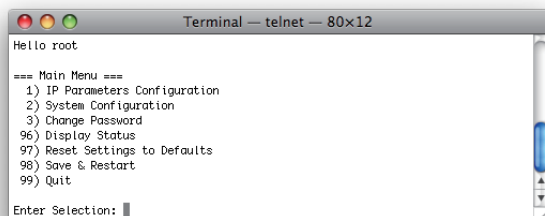
6. Log-in to the printer to be set as a "root" user.  
The default password is "public."  
To change the password, input the changed password.



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>, then 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 : TSP828L\_STR\_T\_001\_  
File Name : sample1.txt  
Paper Size \* : 104 \* 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 TSP828L_STR_T_001_ -o media="X104MMY200MM"  
-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 Command Name List

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

	Option Name		Command Name		Default value ( ● )
	option	value	[ option ]	[ value ]	
Output Options	Print Speed	High	PrintSpeed	0High	●
		Middle		1Middle	○
		Low		2Low	○
	Page Type	Variable Length	PageType	0Variable	●
		Fixed Length		1Fixed	○
Output Options ( extended )	Media Type	Normal Paper	MediaType	0Normal	○
		Label Paper		1Label	●
	Label Detect at Power On	Disable	LabelDetect	0Disable	●
		Enable		1Enable	○
	Print Density	-3	PrintDensity	0Minus3	○
		-2		1Minus2	○
		-1		2Minus1	○
		Standard		3ZERO	●
		1		4Plus1	○
		2		5Plus2	○
		3		6Plus3	○
	Page Feed Type	No Feed	PageCutType	0NoCutPage	○
		Peeler(Tear Bar)		3TearBarPage	●
Feed Options ( TearBar )	Document Feed Type	No Feed	DocCutType	0NoCutDoc	○
		Peeler(Tear Bar)		3TearBarDoc	●

\* ● is the default setting value.

## 6. Confirmed Operating Environments

### ■ Mac OS X 10.4 PowerPC

#### PowerMac G4

OS: Mac OS X 10.4.11  
CPU: PowerPC G4 466MHz  
RAM: 192MB SDRAM

### ■ Mac OS X 10.4 Intel

#### Macbook

OS: Mac OS X 10.4.11  
CPU: Intel Core2 Duo 1.83GHz  
RAM: 512MB

### ■ Mac OS X 10.5 Intel

#### Macbook

OS: Mac OS X 10.5.5  
CPU: Intel Core2 Duo 1.83GHz  
RAM: 512MB 667MHz DDR2 SDRAM

## 7. Revision History

Rev. No.	Date	Content
Rev. 1.0	Sep, 2008	New release
Rev. 1.1	Jan, 2009	Added Uninstalling Star Printer Drivers, Settable Paper Sizes List, Guidelines for Using the lpr Command, Confirmed Operating Environments
Rev. 3.0	Oct. 2009	CD 3.0 support



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Please access the following URL

<http://www.star-m.jp/eng/dl/dl02.htm>

for the latest revision of the manual.

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