

# ***Software Manual***

## ***for Mac OS X***

### ***Supported Models***

- ***SM-T300i***
- ***SM-T400i***
- ***SM-S220i***
- ***SM-S230i***
- ***SM-L200***

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## Introduction

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

## Operating Environment

### Operating System

- ◆ Mac OS X 10.7 / 10.8 / 10.9 <sup>\*1</sup> / 10.10 <sup>\*1</sup> / 10.11

<sup>\*1</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 - 10.10, 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.

◆ This is software of StarPRNT emulation exclusive use.

To use the StarPRNT emulation, use the printer with "StarPRNT".

◆ Target Model and Firmware Versions

Target Model	Interface	Printer F/W
SM-L200	USB <sup>*2</sup> / Bluetooth <sup>*1</sup>	Ver 1.0 or later
SM-S220i	Bluetooth <sup>*1</sup>	Ver 3.0 or later
SM-S230i	USB	Ver 1.0 or later
SM-T300i	Bluetooth <sup>*1</sup>	Ver 3.0 or later
SM-T400i	Bluetooth <sup>*1</sup>	Ver 3.0 or later

<sup>\*1</sup> The communication of Bluetooth interface is "SPP".

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

<sup>\*2</sup> \*USB communication will be supported with firmware version 2.0 or later.

◆ Simple method of switching over between ESC/POS and StarPRNT emulation modes

1. Turn the printer power and open the printer cover.
2. Press and hold the POWER button and the FEED button simultaneously. As soon as the ERROR lamp flashes five times, release the buttons. The emulation switchover takes place automatically.
3. After setting a paper, close the printer cover. The set emulation mode is printed out.

ESC/POS mode: EMU = ESC/POS

StarPRNT mode: EMU = StarPRNT

If the emulation mode is not switched correctly, repeat the above steps 1 to 3.

At that time, in step 2, make sure not to release the buttons until the lamp completes the 5th flash.

4. Please reboot the printer after switching the emulation between StarPRNT and ESC/POS.

\*It will be valid after rebooting the printer.

# 1. Installation/Uninstallation Procedures

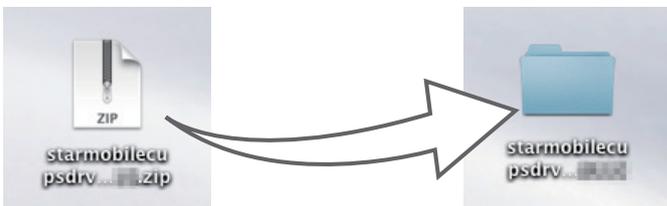
**Cautions :** The account with administrative privilege for the PC should install/uninstall this driver.

## 1.1 Installing Star Printer Drivers

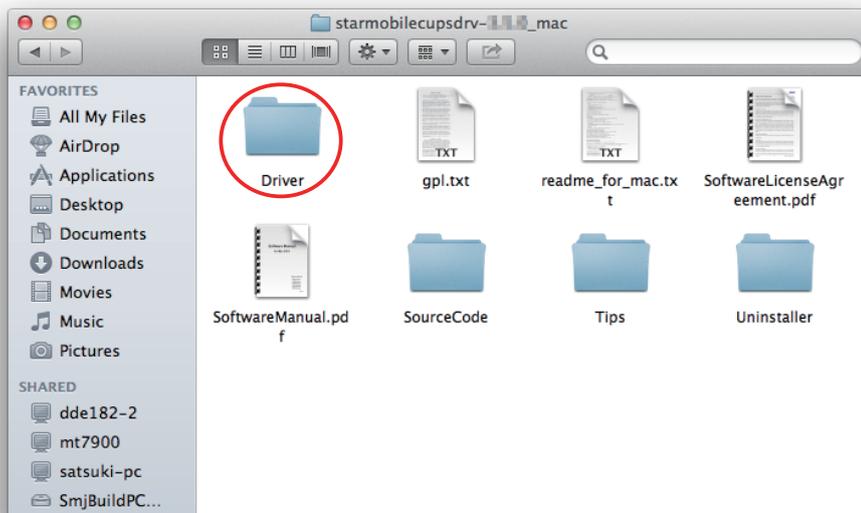
To install the driver, proceed as follows.

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

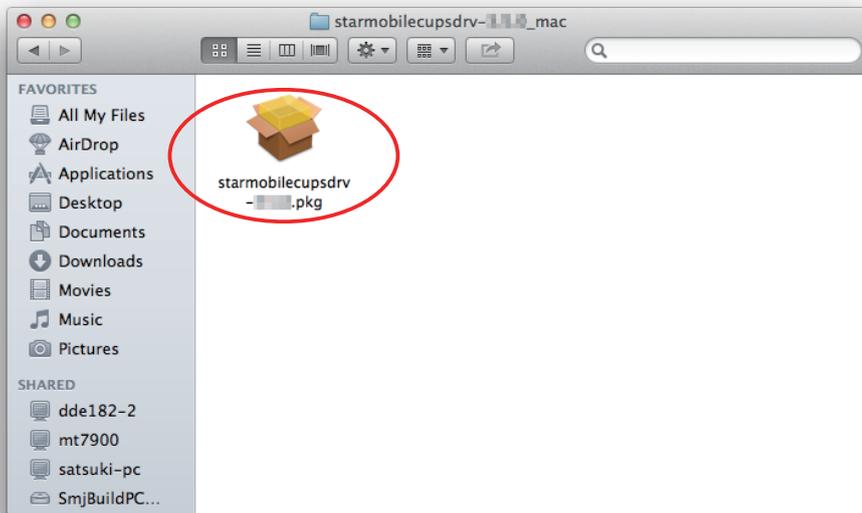
1. Place the "starmobilecupsdv-x.xx.x\_mac\_yyyymmdd.zip" file on your desktop and expand it by double-clicking on the file.



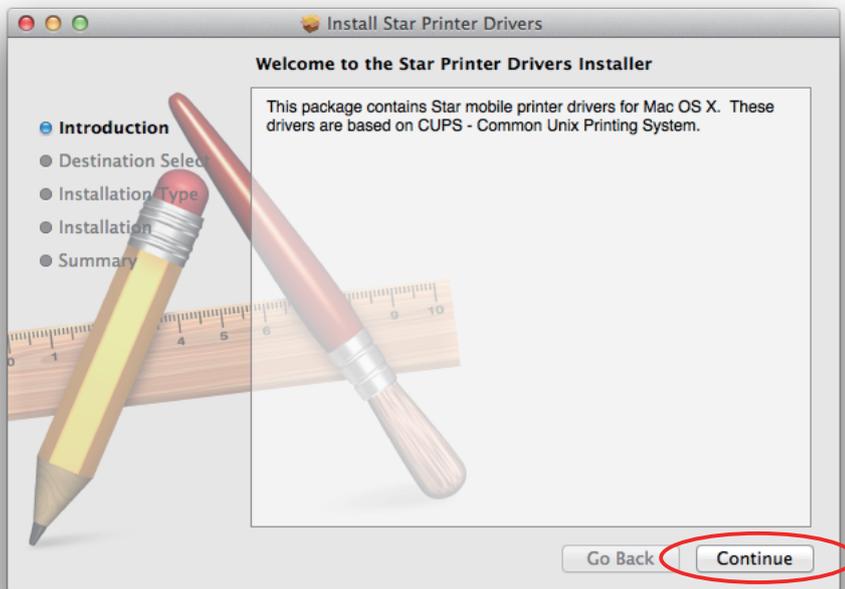
2. The screen below appears by double-clicking the expanded <starmobilecupsdv-x.xx.x\_mac> file. Click on the "Driver" folder to open it.



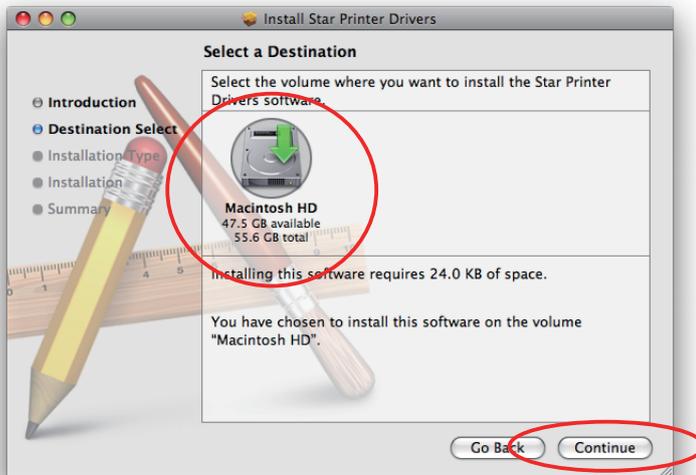
3. The screen below is displayed.  
Double-click <starmobilecupsvr-x.xx.x.pkg> to begin the installation.



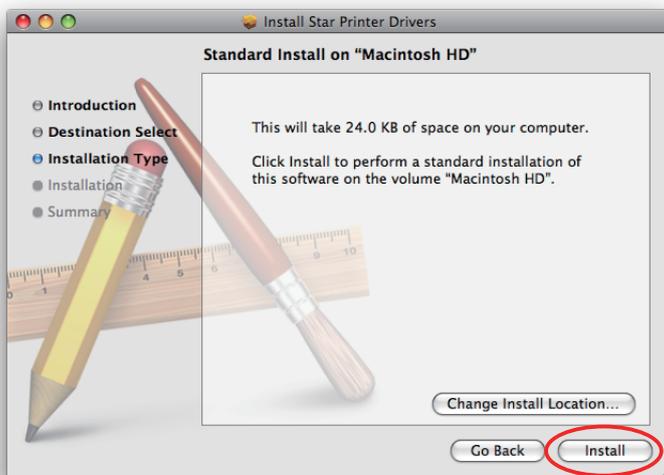
4. The following window is displayed.  
Click [ Continue ].



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



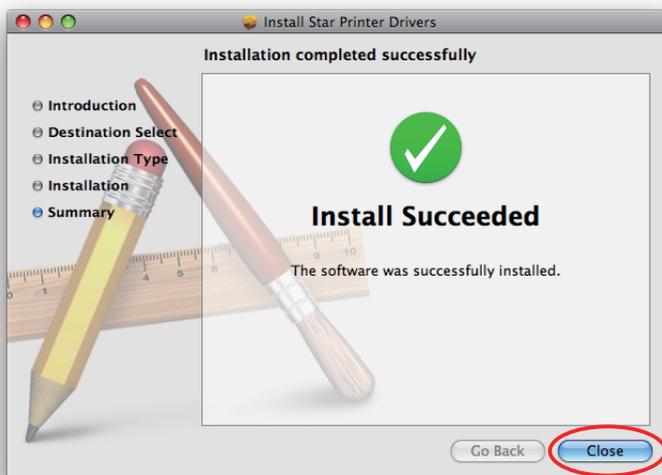
6. Click [ Install ] to start the installation.



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

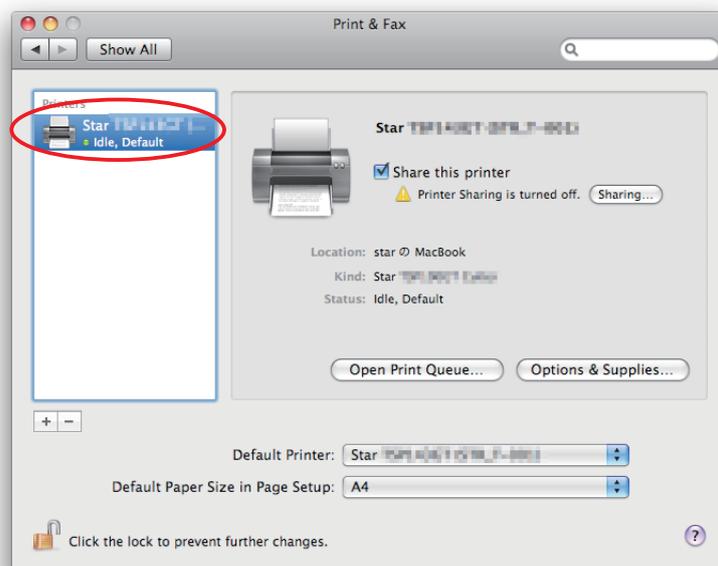
Procedures for registering the printer differ according to the type of interface you use. See the page relating to your environment.

### 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.

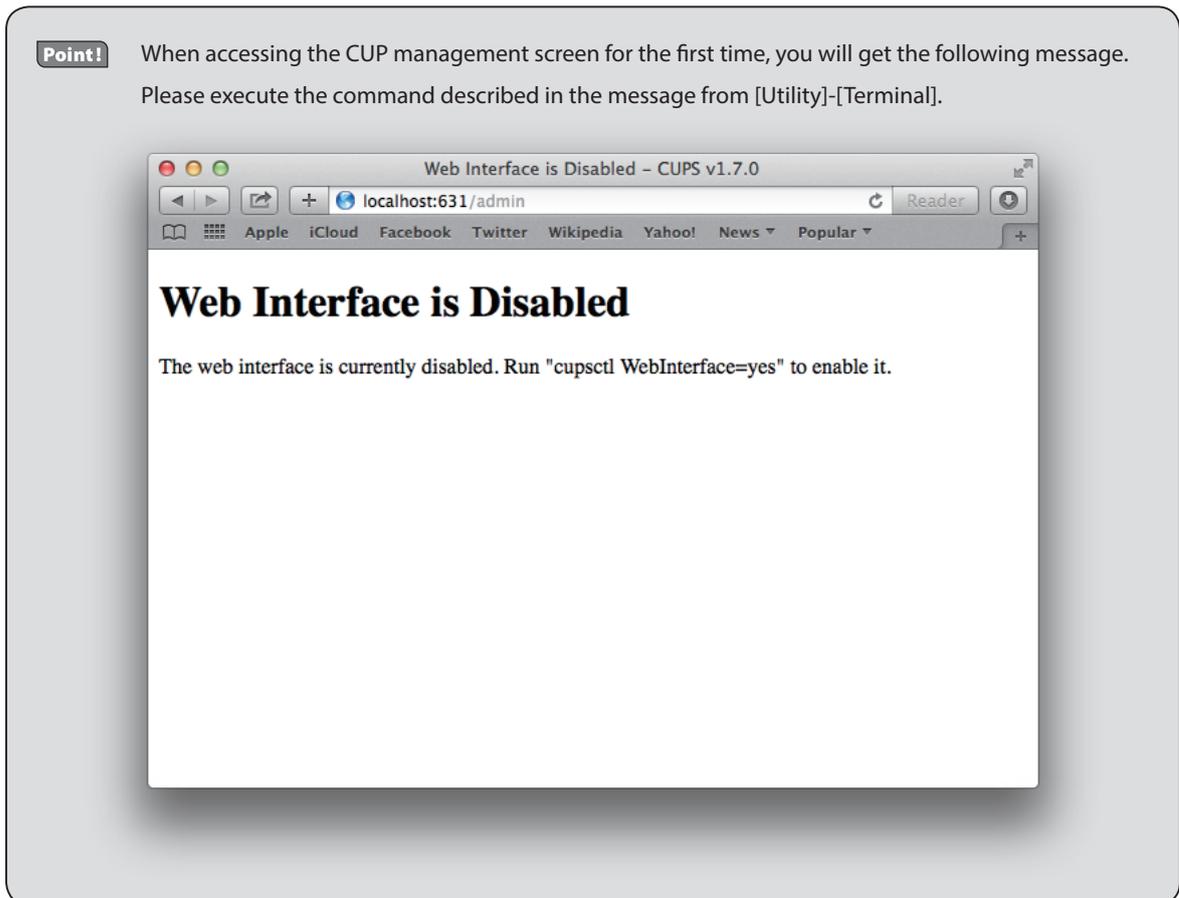


2. Connect the printer, and then turn on the printer's power switch.  
The Plug and Play feature detects the connection of the printer hardware and automatically installs the driver software.
3. If the name of the specified printer is added to the printer list, the printer has been added.



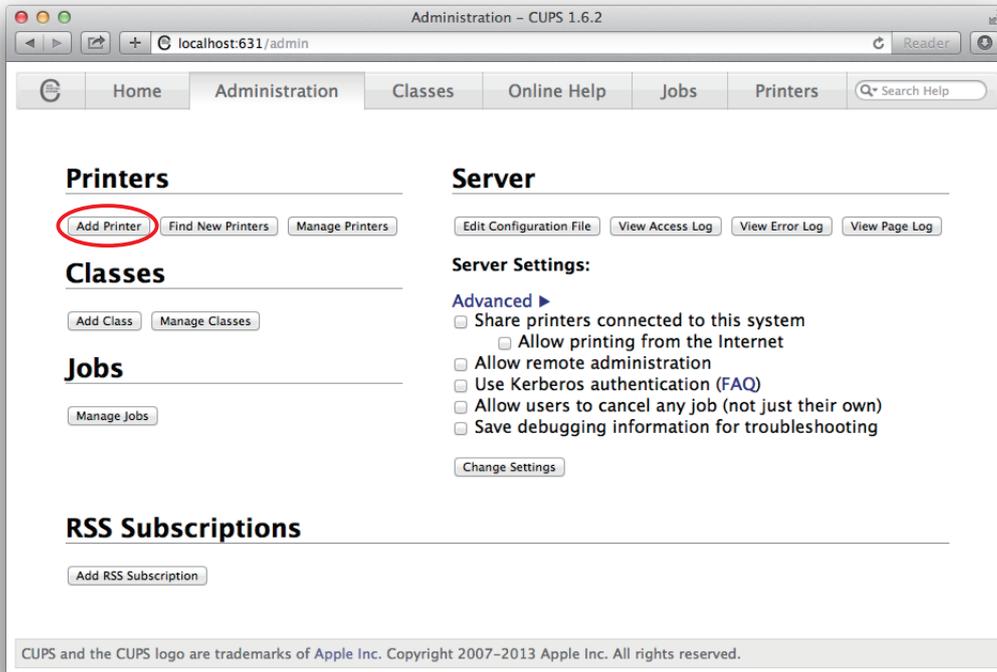
## 1.2.2 With the Bluetooth Interface

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".

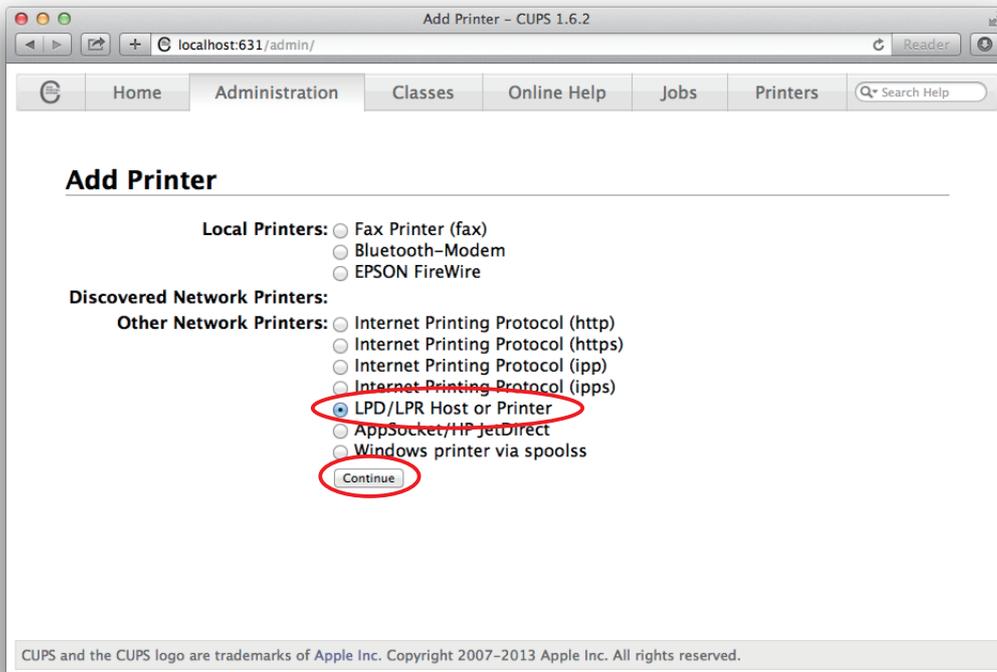


3. Click "Add Printer".

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



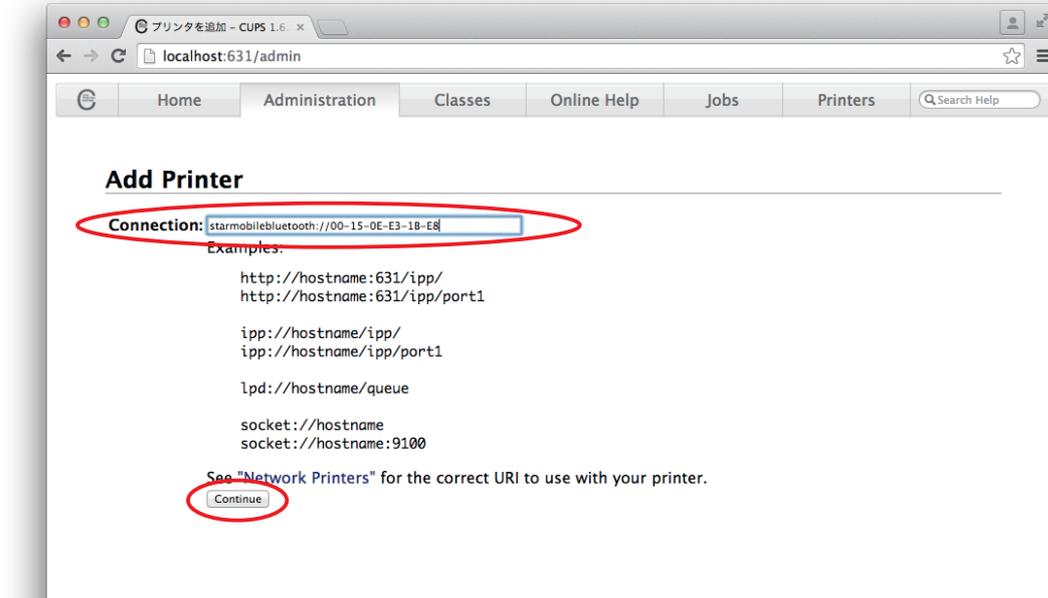
4. Select the "LPD/LPR Host or Printer". Then click "Continue".



5. Specify the device URI for the printer as shown below and click "Continue".

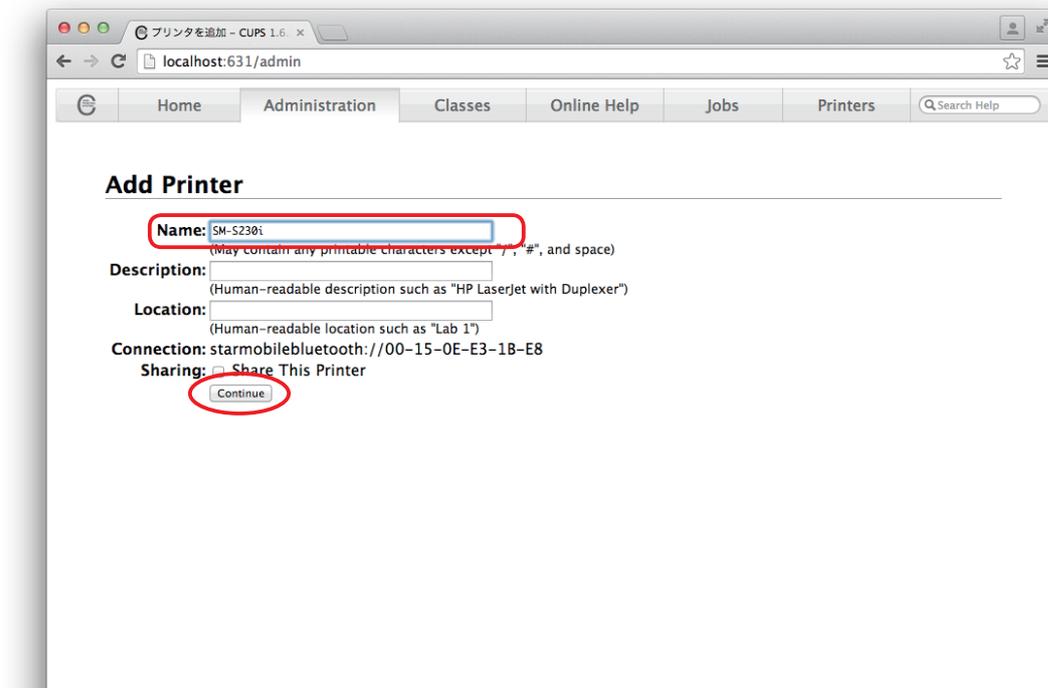
**starmobilebluetooth://<<Bluetooth Address>>**

ex. **starmobilebluetooth://00-12-f3-1c-2f-a4**

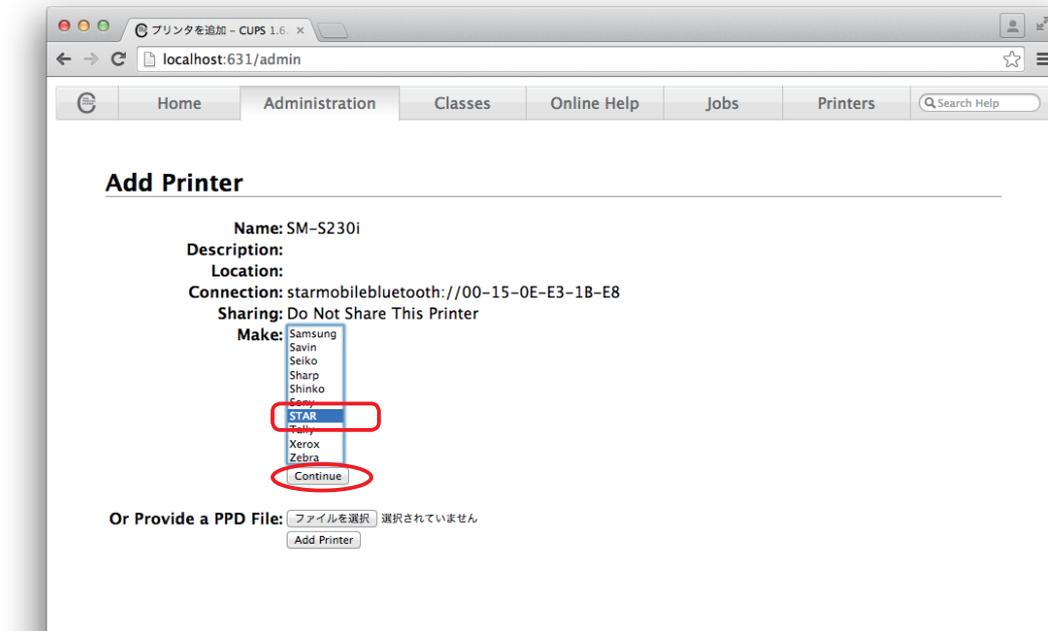


**Point!** The Bluetooth address is printed by the Bluetooth Device Name and MAC Address Printing function. Please refer to the Hardware manual for details.

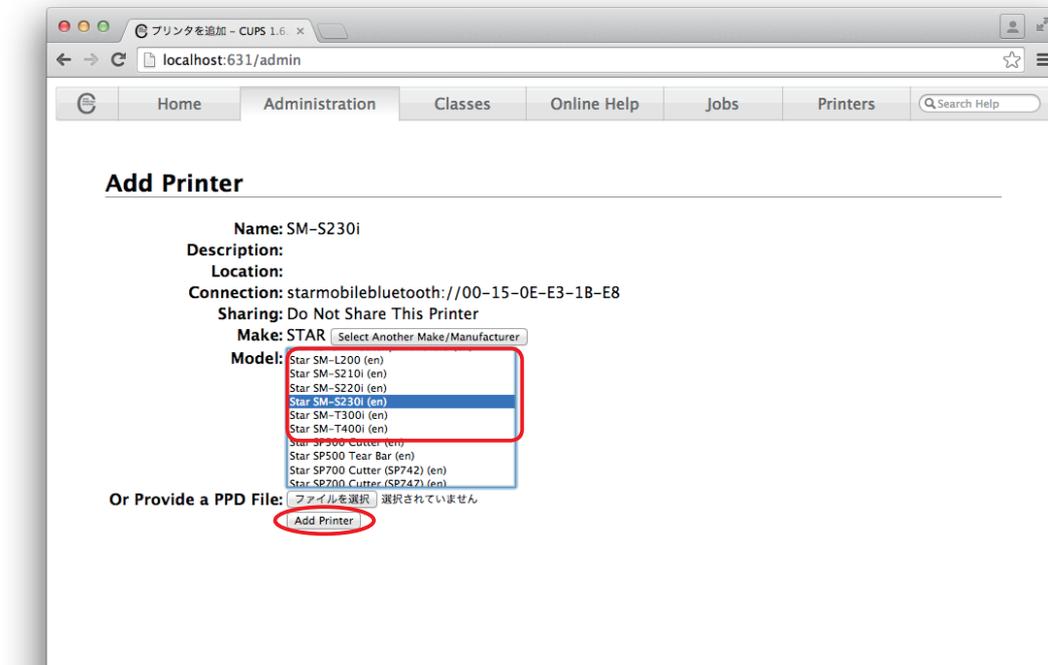
6. In the Add Printer screen, enter the printer name, location and description. Then click "Continue". Location and Description can be left blank.



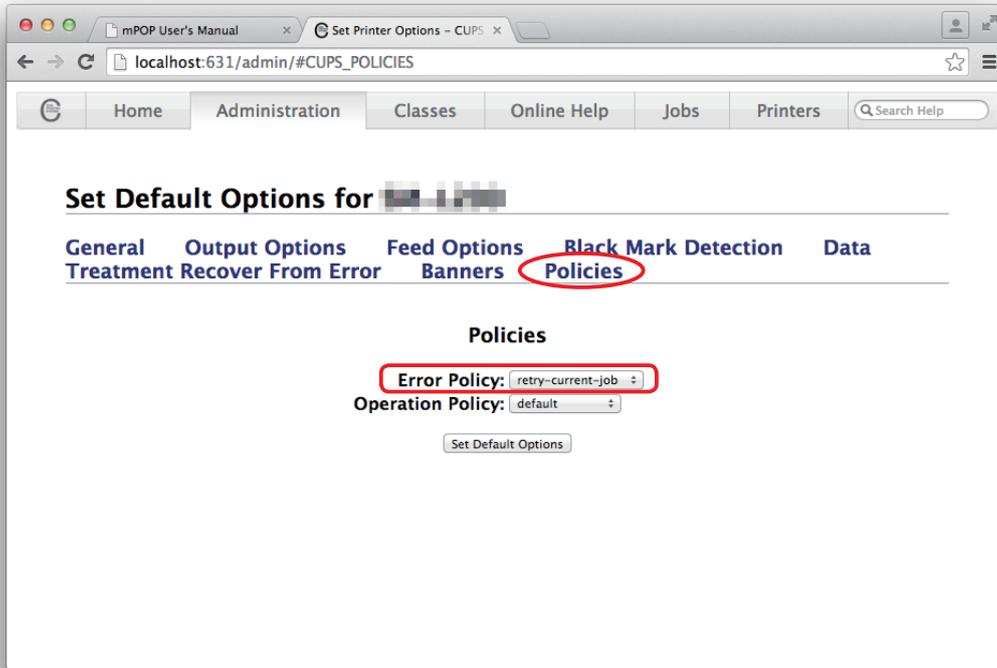
7. Select "STAR" as the Make. Then click "Continue".



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].



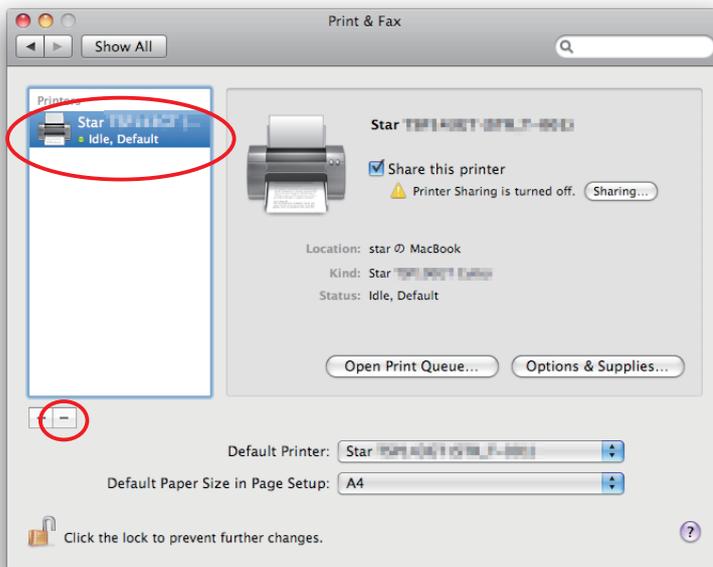
This completes the bluetooth printer installation and registration.



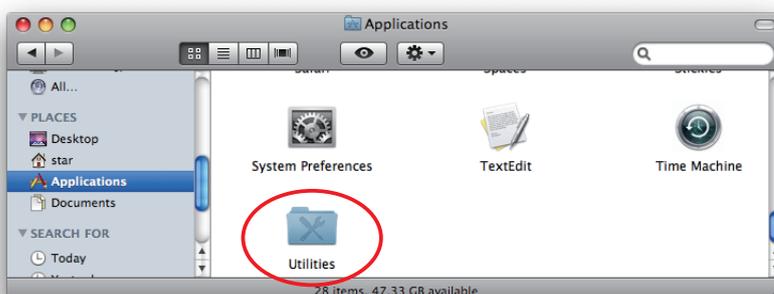
5. In the Apple mark in the menu bar, open [System Preferences] and click on the [Printer & Fax] icon.



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].

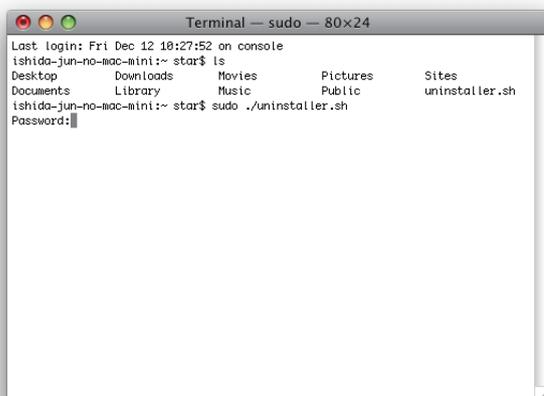


9. The terminal starts up.



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.

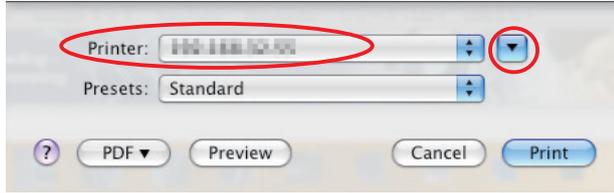
**sudo ./uninstaller.sh**



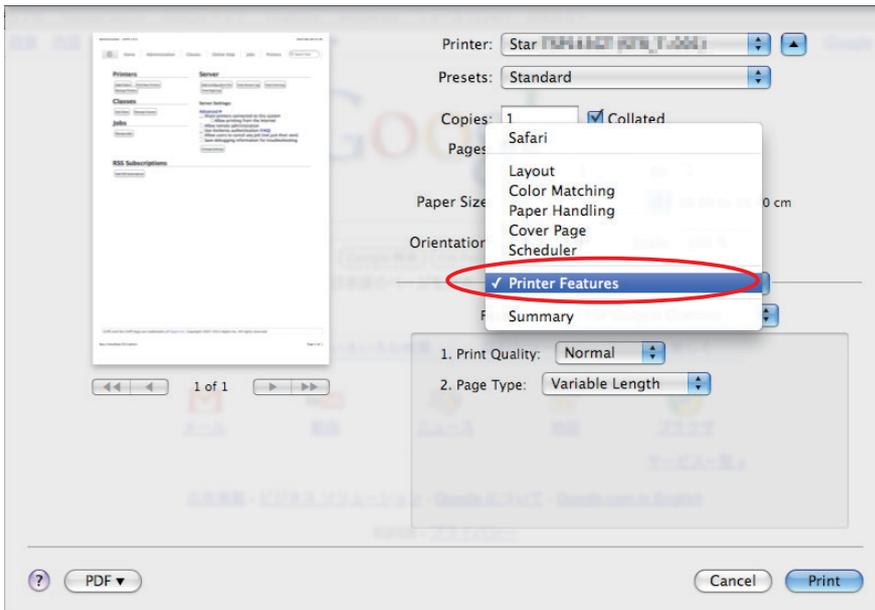
## 2. Setting Printer Functions

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

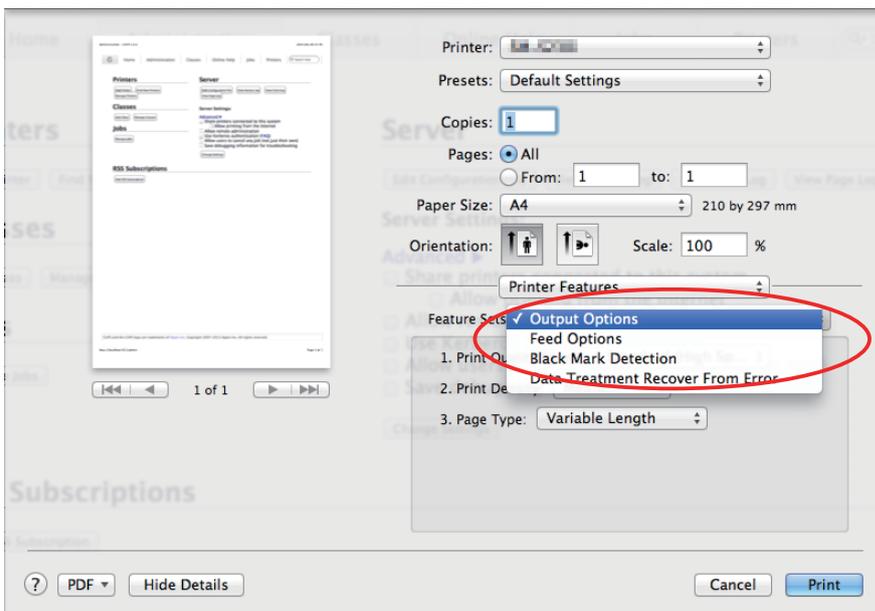
From the "Printer:" pull-down menu, select the printer name to set, then click [▼] to display the details.



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



“Feature Sets:” Customizes printer operation.



## 2.1 Function List

Depending on the printer that you select, the functions that are displayed may differ, and only the ones displayed can be set.

Refer to the function guide for details.

### ■ Output Options

- **Print Quality (Speed):**

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

Setting	Default	Details
Standard (High Speed)	○	Print speed has priority over quality.
High Quality (Low Speed)		Print quality and speed are in the middle.

- **Print Density:**

Sets the printing density.

Setting Value	Default	Details
High		Larger value with -(minus) makes print density lighter.
Medium	○	Prints with normal density.
Low		Larger value with +(plus) makes print density darker.
Special		

- **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.
Black Mark		Outputs blank data as a blank until the black mark. Receipt ends after the black mark is detected.
Black Mark (FRONT, BACK, Gap/Hole)		Outputs blank data as a blank until the black mark. Receipt ends after the black mark is detected. <b>FRONT:</b> Configure this setting if you are using paper with black marks on its front side. <b>BACK:</b> Configure this setting if you are using paper with black marks on its back side. <b>Gap/Hole:</b> Configure this setting if you are using labels.

## ■ Feed Options

- **Page Feed Type:**

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

Setting	Default	Details
No Feed	<input type="radio"/>	The paper feed operation is not performed.
Tear Bar	<input type="radio"/>	Paper is fed to the tear bar (cutting position).

- **Document Feed Type:**

This sets the page feed operation for the last page.

Setting	Default	Details
No Feed	<input type="radio"/>	The paper feed operation is not performed.
Tear Bar	<input type="radio"/>	Paper is fed to the tear bar (cutting position).

## ■ Black Mark Detection

- **Black Mark Detection:**

This sets the Black Mark Detection function.

Setting	Default	Details
Disable	<input type="radio"/>	The Black Mark is not used.
Enable	<input type="radio"/>	The Black Mark is used.

## ■ Data Treatment Recover From Error

- **Data Treatment Recover From Error:**

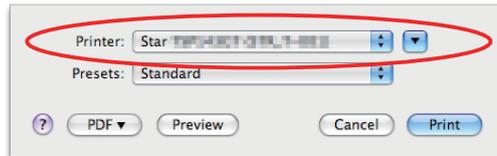
When an error occurs, you can handle the unprinted data which has already been sent to the printer as below.

Setting	Default	Details
No Use	<input type="radio"/>	After the recovery, the unprinted data of the remainder is printed after the recovery from the error.
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.

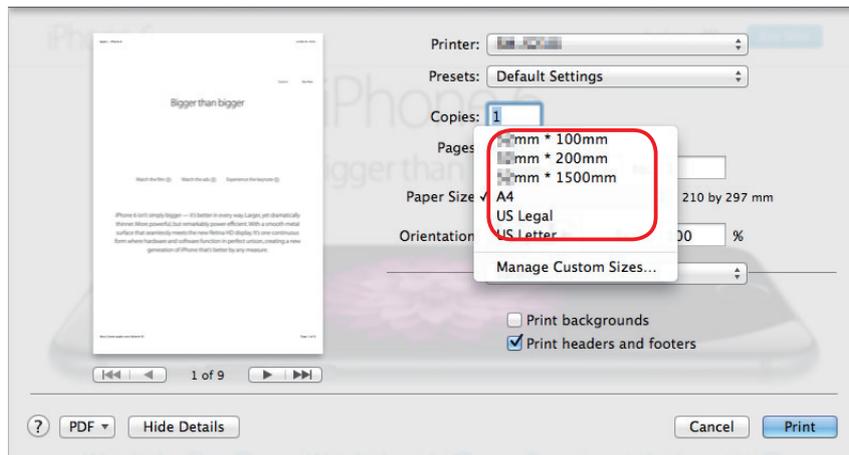
### 3. Setting the Paper Size

#### 3.1 Setting the 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	Supported Models				
	SM-T300i	SM-T400i	SM-S220i	SM-S230i	SM-L200
48mm * 100mm			○	○	○
48mm * 200mm			●	●	●
48mm * 1500mm			○	○	○
72mm * 100mm	○				
72mm * 200mm	●				
72mm * 1500mm	○				
104mm * 100mm		○			
104mm * 200mm		●			
104mm * 1500mm		○			
A4	○	○	○	○	○
Letter	○	○	○	○	○
Legal	○	○	○	○	○

\* ● is the default setting value.

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

## 4. 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 : Star\_SM\_S230i\_\_STAR\_T\_001\_  
File Name : sample1.txt  
Paper Size \* : 48 \* 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 Star_SM_S230i__STAR_T_001_ -o  
media="X48MMY200MM" -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
```

## 4.1 Function List

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

	Option Name		Command	
	option	value	[ option ]	[ value ]
Output Options	Print Quality(Speed)	Standard(High Speed)	<b>PrintSpeed</b>	0High
		High Quality(Low Speed)		1Low
	Print Density	Special	<b>PrintDensity</b>	0Special
		High		1High
		Medium		2Medium
		Low		3Low
	Page Type	Variable Length	<b>PageType</b>	0Variable
		Fixed Length		1Fixed
		Black Mark		2BlackMark
		Black Mark(FRONT)		3FrontBlackMark
Black Mark(BACK)		4BackBlackMark		
Black Mark(Gap/Hole)		5GapHoleBlackMark		
Feed Options	Page Feed Type	No Feed	<b>PageCutType</b>	0NoCutPage
		Tear Bar		1TearBarPage
	Document Feed Type	No Feed	<b>DocCutType</b>	0NoCutDoc
		Tear Bar		1TearBarDoc
Data Treatment Recover From Error	Data Treatment Recover From Error	No Use	<b>DataTreatmentRecoverFromError</b>	0NoUse
		Clear Data By Document Unit		1ClearDataByDocument Unit
Black Mark Detection	Black Mark Detection	Disable	<b>BlackMarkDetection</b>	1Disable
		Enable		2Enable

## 5. Confirmed Operating Environments

- Mac OS X 10.7 Intel, Mac OS X 10.8 Intel  
Mac OS X 10.9 Intel, Mac OS X 10.10 Intel, Mac OS X 10.11 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  
Mac OS X 10.11

CPU: 3.06GHz Intel Core2 Duo

RAM: 4GB 1067MHz DDR2 SDRAM





*URL: <http://www.starmicronics.com/support/>*