

Star Micronics Mobile Printers

Software Manual

< Setup Tool for Wireless LAN >

Supported Models

■ **SM-T300 Series**

Rev.1.1

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Introduction

- To connect your printer to the PC through the wireless LAN (WLAN) interface, you must configure your printer's communication settings according to your network environment. You can use this setup tool (Setup Tool for Wireless LAN) to set the printer's IP address and view the printer's various settings from your PC.
- The following table shows the compatible printer model and its firmware version.

Compatible Model	Firmware Version
SM-T300 Series	Version 1.0 and above

- The Setup Tool for Wireless LAN supports the following Windows OS versions.
 - Windows XP (Service Pack 3 and later)
 - Windows Vista 32-bit and 64-bit
 - Windows 7 32-bit and 64-bit
- You can use this setup tool simply by downloading the .zip file from the STAR's website and uncompressing the file in any folder you like.

Getting Started

Before you can start using this setup tool, you must prepare your printer.

To prepare your printer, proceed as follows.

1. Perform a self test, and check the memory switch settings. (For instructions on how to perform a self test, see the hardware manual of your printer.)
2. Check that the printer is turned off.
3. Use the dedicated RS-232C cable that came with the printer to connect the printer to your PC.
* You must connect the RS-232C cable to read and write wireless LAN settings from this setup tool.
4. Turn the printer on.

1. Installation

The installation steps vary according to the operating system. Therefore, refer to the section for the environment that you are using.

1.1 Windows XP

Note: Ensure the PC has .NET Framework 3.5 or higher installed. If this is not the case, please download the free installer from the Microsoft website.

To install the setup tool, proceed as follows.

- ① Double-click the "Star_Mobile_WLAN_Utility.exe" file created when the "Star_Mobile_WLAN_Utility_Vxxx.zip" file is unzipped.

Note: The Vxxx is the version number of the setup tool.

- ② Follow the instructions on the screen.

1.2 Windows Vista / 7

Note: Administrator privilege is required to run the installation.

To install the setup tool, proceed as follows.

- ① Right-click the "Star_Mobile_WLAN_Utility.exe" file created when the "Star_Mobile_WLAN_Utility_Vxxx.zip" file is unzipped, and then select Run as administrator.

* The Vxxx is the version number of the setup tool.

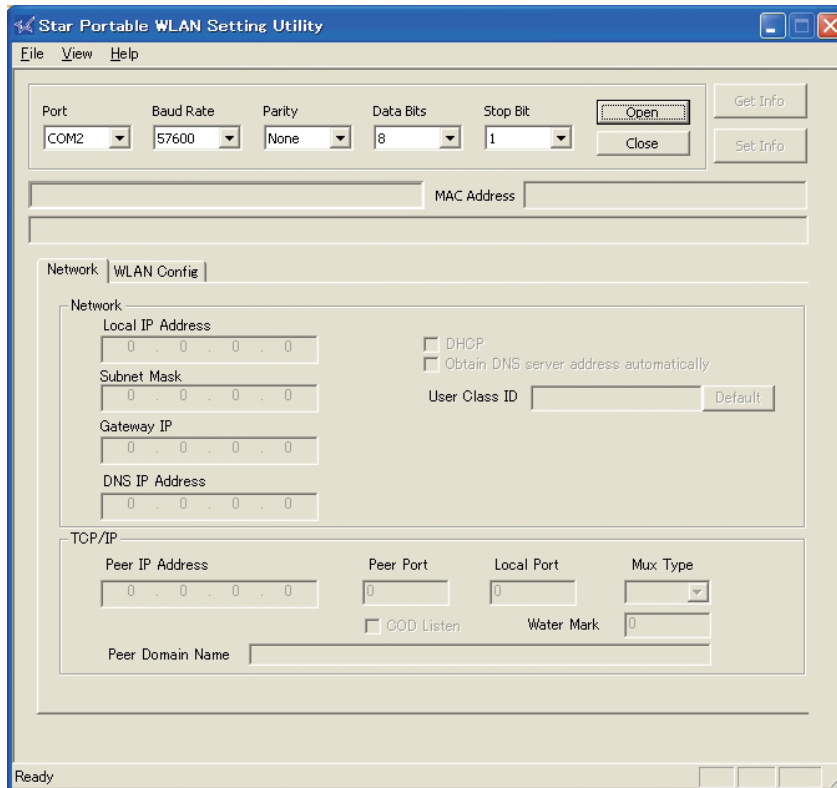
- ② Follow the instructions on the screen.

2. Uninstallation

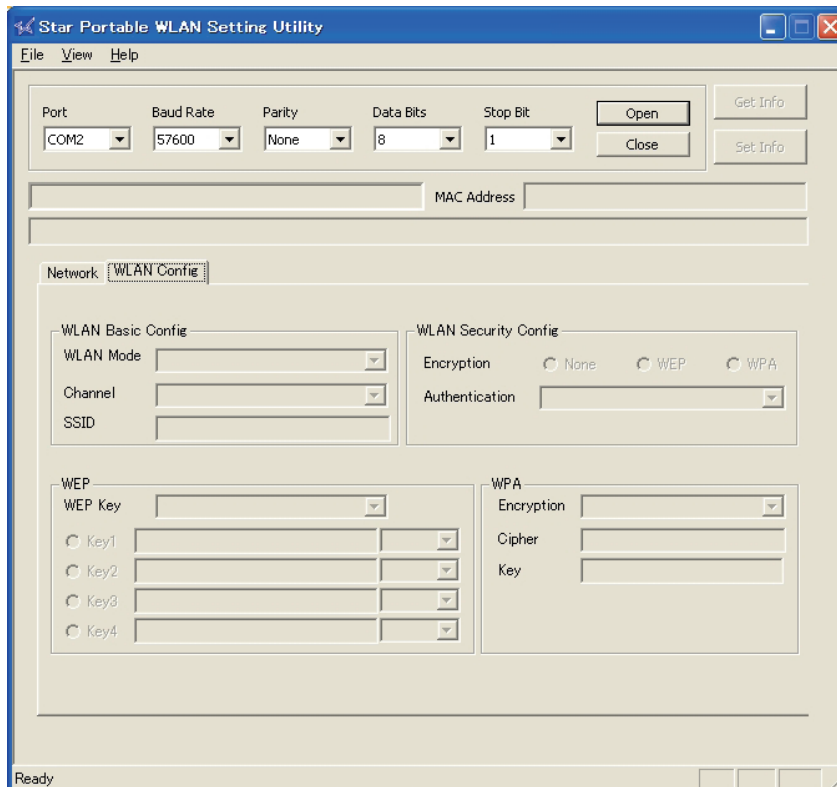
Drag the "Star_Mobile_WLAN_Utility.exe" file to the trash to delete.

3. Using the Utility

Run the “Star_Mobile_WLAN_Utility.exe” program to see the settings screen.



The screenshot shows the 'Star Portable WLAN Setting Utility' window with the 'Network' tab selected. The 'WLAN Config' sub-tab is active. The 'Network' section contains fields for Local IP Address, Subnet Mask, Gateway IP, and DNS IP Address, each with a default value of 0.0.0.0. There are checkboxes for 'DHCP' and 'Obtain DNS server address automatically'. A 'User Class ID' field is set to 'Default'. The 'TCP/IP' section includes fields for Peer IP Address, Peer Port, Local Port, and Mux Type. There are checkboxes for 'COD Listen' and 'Water Mark'. A 'Peer Domain Name' field is also present. The status bar at the bottom indicates 'Ready'.



The screenshot shows the 'Star Portable WLAN Setting Utility' window with the 'WLAN Config' sub-tab selected. The 'WLAN Basic Config' section includes fields for 'WLAN Mode', 'Channel', and 'SSID'. The 'WLAN Security Config' section includes 'Encryption' (set to 'None') and 'Authentication'. The 'WEP' section has a 'WEP Key' dropdown and four radio buttons for 'Key1', 'Key2', 'Key3', and 'Key4', each with a corresponding input field. The 'WPA' section has an 'Encryption' dropdown, a 'Cipher' field, and a 'Key' field. The status bar at the bottom indicates 'Ready'.

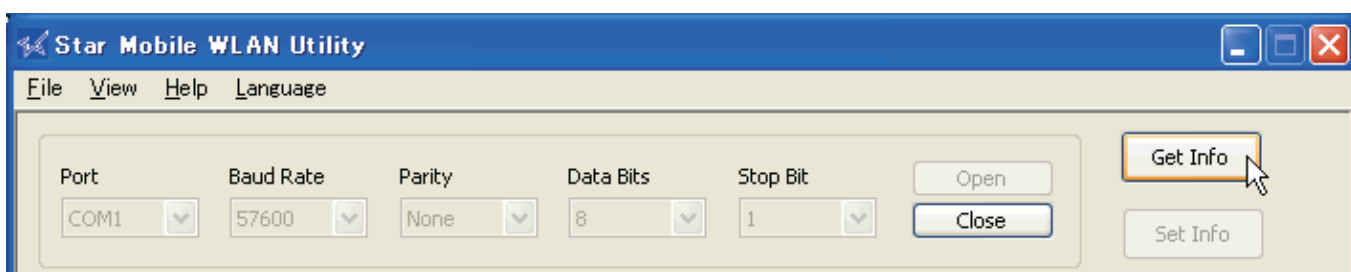
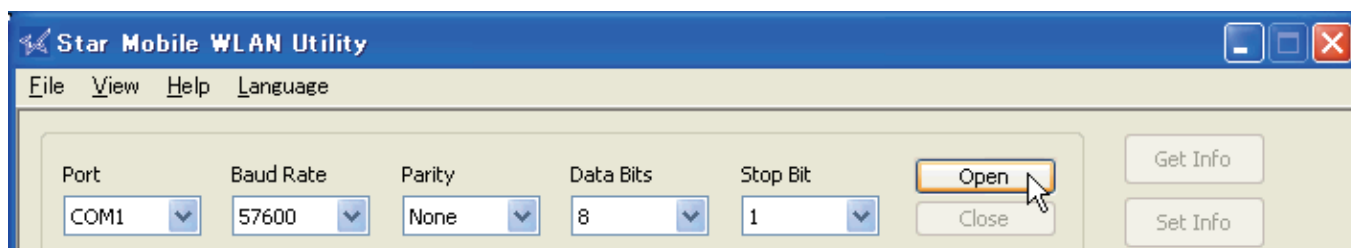
3.1 Connecting to the Utility

You must connect the RS-232C cable to read and write wireless LAN settings from this setup tool.

First, align the PC's RS-232C settings to match the printer's communication settings. On the settings screen, edit the Baud Rate, Parity, Data Bits, and Stop Bit settings to match those of the printer.

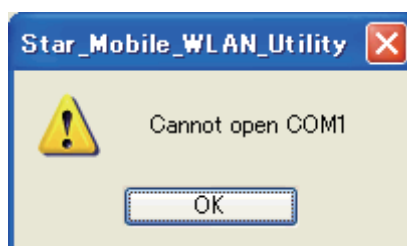
To view the printer's communication settings, perform a self test, and check the memory switch settings. (For instructions on how to perform a self test, see the hardware manual of your printer.)

To load the printer's current wireless LAN settings, click Open and then Get Info.



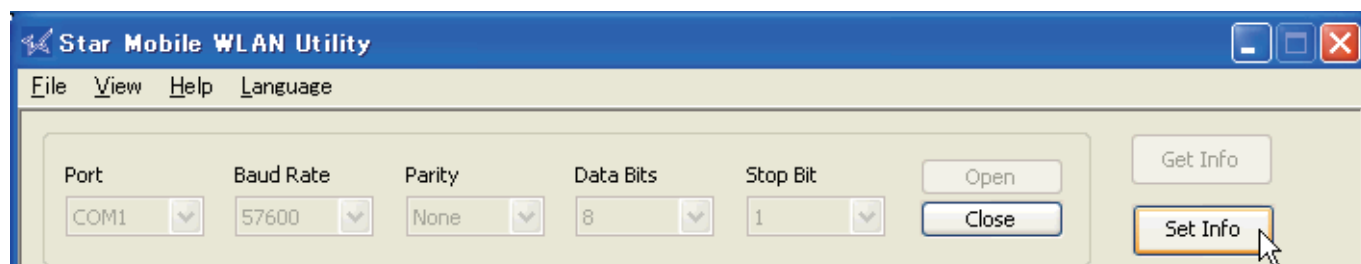
Note:

If the message "Cannot open COM1" appears, COM1 is already in use by another device (another printer for example). In this situation, temporarily change the other device's port to a different port (COM2 for example).



3.2 Saving Connection Settings

After you change the wireless LAN settings, click Set Info to save the settings to the printer.



3.3 Network Settings

1) If the network does not support DHCP, enter the printer's IP address and other settings manually.

Item	Default	Range
Local IP Address	0.0.0.0	0.0.0.0 - 255.255.255.255
Subnet Mask	0.0.0.0	0.0.0.0 - 255.255.255.255
Gateway IP	0.0.0.0	0.0.0.0 - 255.255.255.255.
DNS IP Address	0.0.0.0	0.0.0.0 - 255.255.255.255

Network

Local IP Address
0 . 0 . 0 . 0

Subnet Mask
0 . 0 . 0 . 0

Gateway IP
0 . 0 . 0 . 0

DNS IP Address
0 . 0 . 0 . 0

2) If the network supports DHCP and want to assign the printer's IP address automatically, check the DHCP box.

Item	Default	Description
DHCP	ON	Check the check box to receive the printer's IP address via DHCP.
Obtain DNS server address automatically	OFF	If this check box is not activated, the IP address designated in the [DNS IP Address] will be used as the DNS server address.
User Class ID	PTR - MAC address	Set User Class ID (DHCP option77) Default Format : PTR-<MAC Address>

When you click the Default button, the User Class ID is set.

For example, if the printer's MAC address is "00:30:F9:09:37:D6", the User Class ID is "PTR-00:30:F9:09:37:D6".

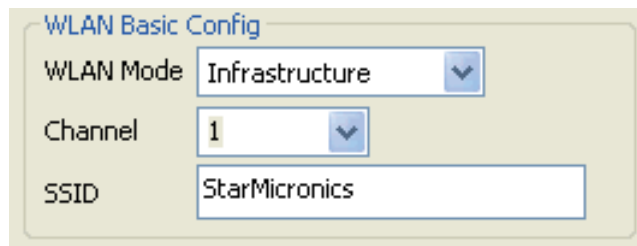
☒ DHCP

☐ Obtain DNS server address automatically

User Class ID PTR-00:30:F9:09:37:D6 Default

3.4 Basic WLAN Configuration

Item	Default	Description
WLAN Mode	Infrastructure	Select either Infrastructure or Ad-Hoc.
Channel	1	1 to 11 (enabled only when WLAN mode is Ad-Hoc)
SSID (Service Set Identifier)	StarMicronics	Enter a sequence of up to 32 letters. The letters of "0 - 9", "A - Z", "a - z", "-", "_ " can be enter.



The screenshot shows a window titled "WLAN Basic Config". It contains three configuration items: "WLAN Mode" with a dropdown menu currently showing "Infrastructure", "Channel" with a dropdown menu currently showing "1", and "SSID" with a text input field containing "StarMicronics".

Note:

When the WLAN mode is AD Hoc, it is impossible to select "WPA" for the WLAN security settings.

3.5 TCP/IP Configuration

When you select Ad-Hoc in WLAN mode, enter the following items, PC's IP Address etc.

Item	Default	Description
Peer IP Address	0.0.0.0	Enter IP address or host name to connect in TCP Client mode. Enter IP address or host name to send in U2S mode.
Peer Port	0	Enter Port number to connect in Client mode.
Local Port	9100	Enter Port number for waiting to be connected in T2S Client. Enter Port number for UDP data in U2S mode.
Mux Type	T2S	Select the communication mode from the followin list. <ul style="list-style-type: none"> • T2S (TCP Server Mode) • COD (TCP Client Mode) • ATC (TCP Server / Client) (AT command emulation) • U2S (UDP)
COD Listen	-	Set the Mux Type to COD -TCP client and enable COD Listen if you are implementing multiple models that communicate via the TCP/IP port.
Water Mark	0	If the Water Mark is a large size than what the serial port can handle, the utility will attempt to send the data over the network.
Peer Domain Name	-	Enter the domain name to receive data.

TCP/IP

Peer IP Address	Peer Port	Local Port	Mux Type
<input type="text" value="0 . 0 . 0 . 1"/>	<input type="text" value="0"/>	<input type="text" value="9100"/>	<input type="text" value="T2S"/> ▼
<input type="checkbox"/> COD Listen		Water Mark	<input type="text" value="0"/>
Peer Domain Name		<input type="text"/>	

3.6 Security Settings

Item	Default	Description
Encryption	None	Select either None, WEP, or WPA.
Authentication	None	Select either None, Open System, Shared Key, or Mixed Mode

WLAN Security Config

Encryption ☒ None ☐ WEP ☐ WPA

Authentication None ▼

Note:

- 1) When the WLAN mode is AD Hoc, it is impossible to select "WPA" for the WLAN security settings.
- 2) To change the WLAN security settings, select "None" and click Set Info first. Then set the WLAN security configuration and save the settings again, because the security setting information cannot be reflected to a self-print result when the security setting is changed (WEP => WPA or WPA=> WEP).

WEP

Item	Default	Range
WEP Key	-	Select either WEP-64 bit or WEP-128 bit.
Key		<p>Select a WEP key from 1-4. Select either ASCII or HEX. Enter the cryptography key.</p> <p>① WEP-64 bit + ASCII Enter 5 characters in ASCII. These characters can be used: "0 - 9", "A - Z", "a - z", "-", "_"</p> <p>② WEP-128 bit + ASCII Enter 13 characters in ASCII. These characters can be used: "0 - 9", "A - Z", "a - z", "-", "_"</p> <p>③ WEP-64 bit + HEX Enter 10 characters in Hexadecimal. These characters can be used: "0 - 9", "A - F", "a - f"</p> <p>④ WEP-128 bit + HEX Enter 26 characters in Hexadecimal. These characters can be used: "0 - 9", "A - F", "a - f"</p>

WEP

WEP Key WEP-64bit ▼

☒ Key1 3230203330 Hex ▼

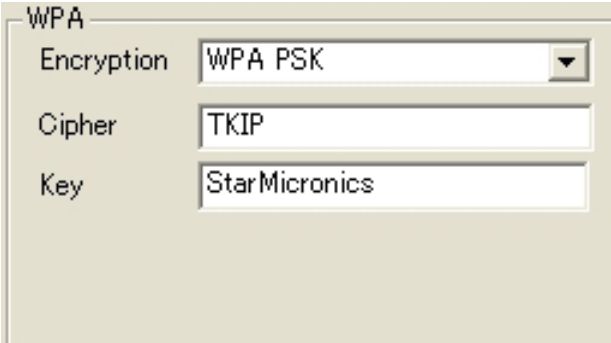
☐ Key2 2033302032 Hex ▼

☐ Key3 3020303020 Hex ▼

☐ Key4 3030203434 Hex ▼

WPA

Item	Default	Description
Encryption	-	Select either WPA PSK or WPA 2PSK.
Cipher	-	When in "WPA PSK" Encryption Mode, "TKIP" is the default setting. When in "WPA 2PSK" Encryption Mode, "AES" is the default setting. (Note) "WPA PSK+AES" and "WPA 2PSK+TKIP" are not supported.
Key	-	Enter the cryptographic key.



The screenshot shows a window titled "WPA" with three configuration fields:

- Encryption:** A dropdown menu currently showing "WPA PSK".
- Cipher:** A text box containing "TKIP".
- Key:** A text box containing "StarMicronics".

4. Revision History

Rev. No.	Date of Revision	Changes
Rev. 1.0	Jun. 2011	First edition
Rev. 1.1	Jun. 2013	Error correction



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