



Ethernet user manual

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1. Interface card name & available printer

Interface Card name	available printer	Front picture	Rear picture
IFA-E	SRP-350 SRP-270		
IFB-E	SRP-370 SRP-372	V 3.0.0	
IFC-E	SRP-275 SRP-500		
RIF-EN10B	SRP-770		





2. Specification

- 1) Hardware version: V3.x.x
 - Label is attached to the Bracket of Printer or the Surface of PCB
 - RIF-EN10B: Serial number manages this.

[Caution] Both dip switch 1 and 2 in hardware should be off.

- Difference of IFA-E and IFB-E: All features are same. Only a writing direction of model name on metal bracket is reverse. It is because of reverse position of the main board of SRP-350 and SRP-370.
- 3) Configuration software tool: Configure_V3.xx.exe
 - It is to set IP address and communication conditions.
- 4) Virtual driver (Option): VirtualCOM_V3.xx.exe
 - It converts output of Serial (COM) port into output of Ethernet (TCP/IP) port.
 - Applicable operating systems: Win 98, 2000, XP, 2003 server
 - Contact the sales rep in case you need. It is optional software.
- 5) Use the designated tool file described below for the optimal operation according to each interface version. This version is described on the metal bracket. Each tool file can be downloaded from website, www.samsungminiprinters.com

Hardware Version	Interface card name	Available Printer	Tool file	Network interface
V 3. x. x	IFA-E	SRP-350, 270		
	IFB-E	SRP-370, 372	Ethornot V/2 v zin	10/100 Base-T All in one
	IFC-E	SRP-275,500	Ethernet_V3.X.Zip	
	RIF-EN10B	SRP-770		
V 2. x. x	RIF-350E	SRP-350, 270	Ethernet_V2.0.zip	10 Base-T
V 1. x. x	RIF-350E	SRP-350, 270	Ethernet_V1.3.zip	10 Base-T

- 6) Interface Card specification
 - Network interface: 10/100 Base-T All in one (auto detection)
 - Protocol: TCP, UDP, IP, ICMP, ARP
 - IP mode: Static IP, DHCP (Dynamic Host Configuration Protocol)
 - RX buffer: 2 KByte
 - Flow control: Hardware (RTS/CTS)
 - Serial speed: 1200 ~ 230400 bps





- 3. How to Install
 - 1) Check the Ethernet interface card version and select the right tool file. V3.x.x is the latest version.
 - 2) Turn off the printer and install Ethernet interface card.
 - 3) Set a serial communication speed at the highest bps.
 - Interface: 1200 ~ 230400 bps
 - SRP-270: max 19200 bps
 - SRP-275, 500: max 19200 bps
 - SRP-350: max 57600bps
 - SRP-370, 372: max 115200 bps
 - SRP-770: max 115200 bps (230400 bps)
 - 4) Connect LAN cable to Ethernet interface card and turn on the printer.
 - Use Direct cable (1:1 cable) to connect to HUB(Switch).
 - Use Cross cable to connect to LAN card of computer.





4. Fixed IP Interface card setup

1) Run "Configure_V3.xx.exe"

🏘 Configure_V3.10			
File(<u>F)</u> Action(<u>A</u>)			
Board list	Network Setting	Serial Setting	
	IP Address	Speed	-
	Subnet Mask	Data bit : 8	bit
	Gateway	Parity : No	ne
	Local Port	Stop bit : 1	bit
	Inactivity time sec. (default : 0)	Flow control : Ha	rdware
	Direct Configuration		
	Direct Configuration IP	Address	
	DHCP Mode F:	irmware Version	
	Search Setting Upload Exit		
Normal			BIXOLON

2) Select "Search"

🏘 Configure_V3.10			
File(<u>F)</u> Action(<u>A</u>)			
Board list	Network Setting	Serial Setting	
00:15:94:10:00:01	IP Address 192.168.100.134	Speed 57600 -	
	Subnet Mask 255.255.255.0	Data bit : 8 bit	
	Gateway 192.168.100.254	Parity : None	
	Local Port 6000	Stop bit : 1 bit	
	Inactivity time 0 sec. (default : 0)	Flow control : Hardware	
	-Direct Configuration		
	Direct Configuration IP Address		
	DHCP Mode F:	irmware Version 1.1	
	Search Setting Upload Exit		
Status : Normal		BIXOLON	





If you know IP address check in the box of "Direct configuration" and enter IP address.
Then select "search"

🏘 Configure_V3.10		
File(<u>F</u>) Action(<u>A</u>)		
Board list	Network Setting	rial Setting
	IP Address	Speed 🗾
	Subnet Mask	Data bit : 8 bit
	Gateway	Parity : None
	Local Port	Stop bit : 1 bit
	Inactivity time sec. Fl (default : 0)	ow control : Hardware
	Direct Configuration	
	☑ Direct Configuration IP Addr	ess 192.168.100.134
	DHCP Mode Firmwa	are Version
	Search Setting Upload Exit	
Normal		BIXOLON

- 3) After Selecting the MAC address in "Board list", and then Input IP Address, Subnet mask and Default Gateway (Check the user's Sub-circumstance)
 - Enter IP Address, Subnet mask, Default Gateway according to your Sub environment.
 - Caution: There is no Gateway when the printer is connected to PC direct. Write the Same with IP address at Gateway address.
 - The Special Feature: In case that there is no data transmission for about 3 minutes, Printer's Ethernet interface will broadcast its address to the Gateway Address. (To store the Gateway with its IP)
- 4) Enter value at Local port (Default: 6000, Choose from 6000 to 10000)
- 5) Set the Inactivity time as "0". (1 ~ 65535 sec are usable)
 - When you set up the digit in Inactivity time, Ethernet interface will Disconnection by force after designated time. When you set up "0", Forced Disconnection function is not available.
- 6) Set Baud rate (Set it as same as the printer condition. Highest bps can be used)
- 7) When setting finishes select "Setting". Select "Exit" and finish the program.





5. Flow IP Interface card setup

1) After Executing the "Configure_V3.xx.exe", then Click the "Search" button.

🏘 Configure_V3.10		
File(<u>F</u>) Action(<u>A</u>)		
Board list	Network Setting	Serial Setting
00:15:94:10:00:01	IP Address 192.168.100.134	Speed 57600 -
	Subnet Mask 255.255.255.0	Data bit : 8 bit
	Gateway 192.168.100.254	Parity : None
	Local Port 6000	Stop bit : 1 bit
	Inactivity time 0 sec. (default : 0)	Flow control : Hardware
	Direct Configuration	
	Direct Configuration IP	Address
	DHCP Mode Fi	rmware Version 1.1
	Search Setting Upload Exit	
Status : Normal		BIXOLON

- 2) Select the MAC address "Board list"
- 3) Check the DHCP Mode, and then click the "Setting" button.

(DHCP: Dynamic Host Configuration Protocol)

🏘 Configure_V3.10		
File(<u>F)</u> Action(<u>A</u>)		
Board list	Network Setting	Serial Setting
00:15:94:10:00:01	IP Address 192.168.100.134	Speed 57600 🔻
	Subnet Mask 255.255.255.0	Data bit : 8 bit
	Gateway 192.168.100.254	Parity : None
	Local Port 6000	Stop bit : 1 bit
	Inactivity time 0 sec. (default : 0)	Flow control : Hardware
	Direct Configuration	
	Direct Configuration IP J	Address
	DHCP Mode Fi	rmware Version 1.1
	Search Setting Upload Exit	
Status : Normal		BIXOLON





- 4) Stand by more than 10 seconds. (the Time that Ethernet interface receive the flow IP)
- 5) Check the given Flow IP to click the "Search" button.

🏘 Configure_V3.10			
File(<u>F</u>) Action(<u>A</u>)			
Board list	Network Setting	Serial Setting	
00:15:94:10:00:01	IP Address 192.168.100.200	Speed 57600 -	
	Subnet Mask 255.255.255.0	Data bit : 8 bit	
	Gateway 192.168.100.254	Parity : None	
	Local Port 6000	Stop bit : 1 bit	
	Inactivity time 0 sec. (default : 0)	Flow control : Hardware	
	Direct Configuration		
	Direct Configuration IP	Address	
	☑ DHCP Mode F:	irmware Version 1.1	
	Search Setting Upload Exit		
Status : Normal		BIXOLON	

[Caution] In case that you use Flow IP, you must use it after standing by for about 10 seconds from the power of Printer ON (the Time that Ethernet interface receive the Flow IP)





- 6. Firmware (software) up grade
 - [Caution] If the Power of Printer is turned off while the Firmware is upgrading, then a restoration is not possible. (It can be restored in our Factory by using a separate downloading equipment.)
 - 1) After Executing the "Configure_V3.xx.exe", click the "Search" button.

🐴 Configure_V3.10		
File(<u>F</u>) Action(<u>A</u>)		
Board list	Network Setting	Serial Setting
00:15:94:10:00:01	IP Address 192.168.100.134	Speed 57600 -
	Subnet Mask 255.255.255.0	Data bit : 8 bit
	Gateway 192.168.100.254	Parity : None
	Local Port 6000	Stop bit : 1 bit
	Inactivity time 0 sec. (default : 0)	Flow control : Hardware
	Direct Configuration	
	Direct Configuration IP	Address
	DHCP Mode F	irmware Version 1.1
	Search Setting Upload Exit	
Status : Normal		BIXOLON

- 2) Selection the MAC address in "Board list".
- 3) After clicking the "Upload" button, then select the file to be downloaded.
 - (File Name: rom_TCP_Vxx.bin)

File Select						? 🔀
Look jn:	🚞 romfile		•	← 🗈 😁	* 🎟 -	
My Recent Documents Desktop My Documents	MACerase_TCP rom_TCP_V10 rom_TCP_V11					
My Computer						
My Network Places	File <u>n</u> ame: Files of <u>t</u> ype:	rom_TCP_V11 Bin File (*.bin) Open as read-only			• [•]	<u>O</u> pen Cancel

4) When the Downloading is completed, Click the "Search" button and then check if Firmware version is amended.





7. Ethernet test

In case that you don't have a Tool to Test, you could use the Printer's Driver. After Adding the Standard TCP/IP port in Printer's Driver, and then test it. Win 2000, XP, 2003 server are available OS.

- 1) Install printer driver
 - Download and install the printer driver from homepage. www.samsungminiprinters.com
 - Re-boot the personal computer.
- 2) Open printer properties box at installed printer driver.

💩 SAMSUNG SRP-350 Properties 🛛 🔹 💽 🔀
Device Settings Additional Commands About General Sharing Ports Advanced
SAMSUNG SRP-350
Location:
<u>Comment</u>
Model: SAMSUNG SRP-350
Color: No Paper available:
Double-sided: No
Staple: Unknown
Speed: Unknown
Maximum resolution: 180 dpi
Printing Preferences Print <u>T</u> est Page
OK Cancel Apply





3) Select "Ports" and click the button "Add Port"

💩 SAMSUNG SRP-350 Properties 🛛 🔹 🔀								
	Device Se General	Additional Commands			Ad	About vanced		
	SAMSUNG SRP-350						_	
	Print to the follo checked port.	owing port(s).	Documents	will print to	the first fr	ee		
	Port I	Description		Printer	000.050		^	
		Printer Port	5	SAMSUNG	SRP-350		_	
		Printer Port						
	🗆 сом1: 9	Serial Port						
	СОМ2: 9	Serial Port						
		Serial Port						
	□ COM3: \$	Serial Port						
	Add Port	<u>t</u>]	<u>D</u> elete F	Port	<u>C</u> onfig	gure Port		
	✓ Enable bidirectional support							
	Enable print	ter pooling						
	OK Cancel Apply							

4) Select "Standard TCP / IP port" and choose "New Port"

Printer Ports	? 🔀
<u>Available port types:</u>	
Local Port PDF Port	
Standard TCP/IP Port	
New Port Type	New <u>P</u> ort Cancel





5) Go next when Standard TCP/IP Printer Port Wizard activated.

Add Standard TCP/IP Printer Port Wizard 🛛 🔀					
	Welcome to the Add Standard TCP/IP Printer Port Wizard				
	You use this wizard to add a port for a network printer.				
Before continuing be sure that: 1. The device is turned on. 2. The network is connected and configured.					
	To continue, click Next.				
	< Back Next > Cancel)			

6) Write IP address at box "Printer Name or IP Address" and go next.

- IP address in this case must be the same as the value given to Ethernet card.

Add Standard TCP/IP Printer Port Wizard						
Add Port For which device do you want to add a port?						
Enter the Printer Name or IP address, and a port name for the desired device.						
Printer Name or IP <u>A</u> ddress:	192.168.100.134					
Port Name:	Port Name: IP_192.168.100.134					
	< <u>B</u> ack <u>N</u> ext >	Cancel				





7) Go next.

Add Standard TCP/IP Printer Port Wizard						
Additional Port The device	t Information Required could not be identified.					
The detected de 1. The device is 2. The address o Either correct the previous wizard p	vice is of unknown type. Be sure that: properly configured. on the previous page is correct. address and perform another search on the network by returning to the page or select the device type if you are sure the address is correct.					
Device Type-						
Ostandard	Generic Network Card					
O <u>C</u> ustom	S <u>e</u> ttings					
	< <u>B</u> ack <u>N</u> ext > Cancel					

8) Select "Close"

se
12





9) Click the button "Configure Port"

💩 SAMSUNG SRP-350 Properties 🛛 🔹 🔀						
Device Settings General SAMSUNG Print to the following p	Addit Sharing à SRP-350 port(s). Documents	ional Commands Ports will print to the first fr	About Advanced ee			
Port Description Printer COM1: Serial Port COM2: Serial Port COM4: Serial Port COM3: Serial Port FILE: Print to File IP_192.168.100.134 Standard TCP/IP Port Add Port Delete Port Configure Port Add Port Delete Port Configure Port Enable bidirectional support Enable printer pooling						
		Close Can	cel <u>Apply</u>			

10) Enter "Port Number" and OK.

- It must be same as the value given to Ethernet card.

Configure Standard TCP/IP Port Monitor					
Port Settings					
Port Name:	IP_192.168.100.134				
Printer Name or IP <u>A</u> ddress:	192.168.100.134				
Protocol	O⊥PR				
- Raw Settings					
Port Number: 6000					
LPR Settings					
<u>S</u> NMP Status Enabled					
Community Name: public					
SNMP <u>D</u> evice Index: 1					
	OK Cancel				





11) Go Apply.

💩 SAMSUNG SRP-350 Pi	operties			? 🔀
Device Settings General SH SAMSUNG SRP- Print to the following port(s). checked port.	Additi haring 350 Documents	onal Comma Ports will print to th	nds	About Advanced
Port □ COM1: □ COM2: □ COM4: □ COM3: □ FILE: ☑ IP_192.168.100.134 ▲dd Port	Description Serial Port Serial Port Serial Port Serial Port Print to File Standard T	CP/IP Port	Printer	re Port
Enable printer pooling		Close	Cance	

12) Select General / Print Test Page and check whether print is okay.

💩 SAMSUNG SRP-350 Properties 🛛 💽 🔀						
Device Settings Ar General Sharing	dditional Commands Ports	About Advanced				
SAMSUNG SRP-350						
Location:						
<u>C</u> omment:						
Model: SAMSUNG SRP-350						
Features						
Lolor: No F	'aper available:					
Staple: Unknown						
Speed: Unknown						
Maximum resolution: 180 dpi		~				
Printing Pre	eferences) Print <u>T</u> e	st Page				
	OK Cancel					





[Attachment 1] Printer dipswitch setting

Printer Model	Baud rate(bps)		Hand shak	ing & parity		
		I				
	bps	SW1-7	SW1-8			
SRP-350	57600	off	on	DTR/DSR: SW1-3 off 8 data bit: SW1-4 off		
	38400	on	on			
	19200	off	off	none parity	: SW1-5 off	
	9600	on	off			
	bps	SW2-7	SW2-8		CW0.2 off	
000.070	19200	On	On	DIR/DSR:	SW2-3 Off	
3RP-2/U	9600	Off	Off	8 data bit: SW1-4 off none parity: SW1-5 off		
	4800	On	Off			
	2400	Off	On			
	bps	SW1-1	SW1-2			
SRP-370	115200	on	on	DTR/DSR: SW1-3 off 8 data bit: MSW9 none parity: MSW9		
SRP-372	38400	off	on			
	19200	on	off			
	9600	off	off			
				SRP-275	SRP-500	
	bps	SW2-7	SW2-8		- ספס/ סדח	
SRP-275	19200	ON	Off	SW2-3 off	SW2-3 ON	
SRP-500	9600	Off	Off		0112-3 ON	
	4800	Off	ON	8 data bit: SW2-4 off none parity: SW2-5 off		
	2400	ON	ON			
	bps	SW2-1	SW2-2	DTO/OTO-	SW2 2 ON	
SDD 770	115200	ON	ON	R 13/013: 3W2-3 UN		
357-110	57600	Off	ON	o uala bil		
	19200	ON	Off	none parity		
	9600	Off	Off			