DCS & Labelling Worldwide

LAN CARD INSTALLATION GUIDE

For printer models:

GL 4xxe Series

Read this Installation Guide before and during the installation of the above accessory. Keep this Installation Guide handy for future reference.

Be sure to read this quick guide thoroughly before using this printer. It is an integral part of the product and should be kept in the immediate vicinity of the device and available to the operating staff.

1.2 Limitation of liability

All information in this manual have been compiled under due consideration of federal standards and regulations.

The manufacturer will not be held liable for damage resulting from:

- Disregarding these instructions
- Unintended use of the printer
- Unauthorized technical modifications
- Use of unapproved spare parts
- Use of unapproved consumables

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

1.3 Explanation of symbols

This instruction manual uses various warning icons to help you understand the safe operation of your printer. Explanations of the icons are below.

WARNING!

Indicates neglectful or erroneous use may cause irreparable damage to the product, serious injury to the operator, or worse.

CAUTION!

Indicates a specific point where caution should be used. The graphic within the triangle will indicate the specific issue, i.e.; the sign on the left indicates a caution for potential electrical shock.

CAUTION!

Indicates a potentially hazardous situation which, if not avoided, may result in damage to your product or host equipment.

NOTE!

Emphasizes useful tips or recommendations for efficient and smooth operation of your printer.

1.4 Contact and Document Information

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Extensive contact information of worldwide SATO operations can be found on the Internet at **www.satoworldwide.com**

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GL4exe LAN Card Installation

Before installing the LAN card, make sure the printer is OFF and disconnected from the power supply.

1. Use a Phillips head screwdriver to remove the two screws that secure the Cover Plate to the LAN Card slot. Set the plate and screws aside.
2. Make sure you have discharged any static electricity (by touching a grounded component on the printer) and plug the LAN card into the slot so that it snaps into place. Hold the LAN card by the mounting plate only.
3. Secure the LAN card with the two screws removed in Step 1.
4. Connect the printer to the AC outlet and to the host computer with the relevant cables and turn the printer ON.
5. Refer to the Operator's Manual for the procedure to configure the LAN settings. A summary of this procedure is reproduced on the following page, but the Operator's Manual contains further details in the section on Interfaces Mode (See page 4-52 and subsequent pages).

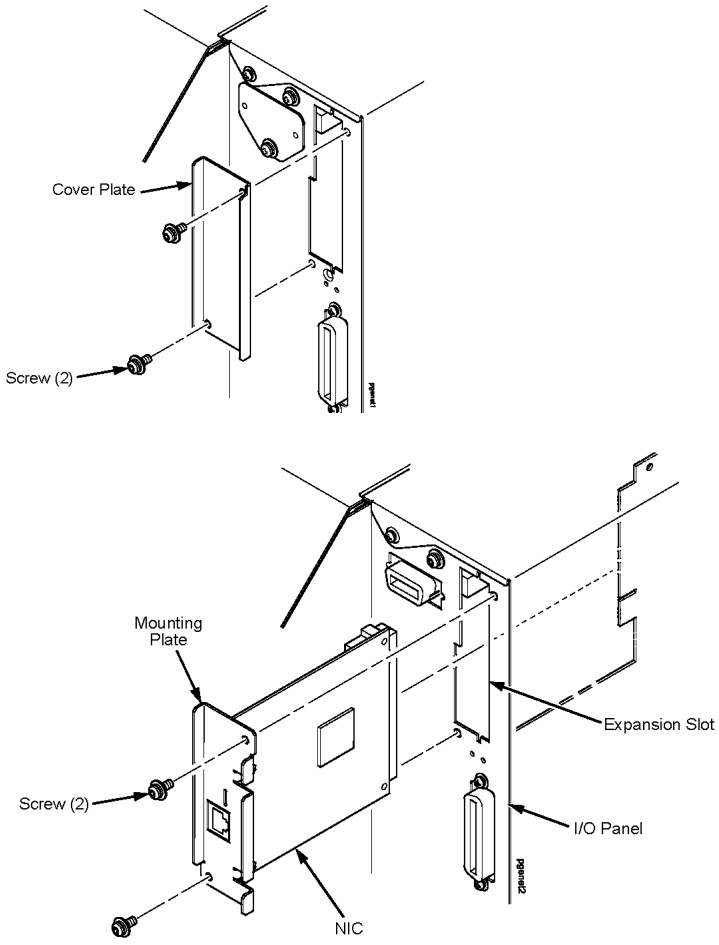

Figure 1. Removing the interface cover plate and installing the LAN interface card

LAN CONFIGURATION FOR ETHERNET CONNECTION

Once the LAN card is installed, you can access the Ethernet settings in the GL's Interfaces Mode menu. An overview of the LAN options is listed below, followed by explanations of relevant LCD menu options in the following pages.

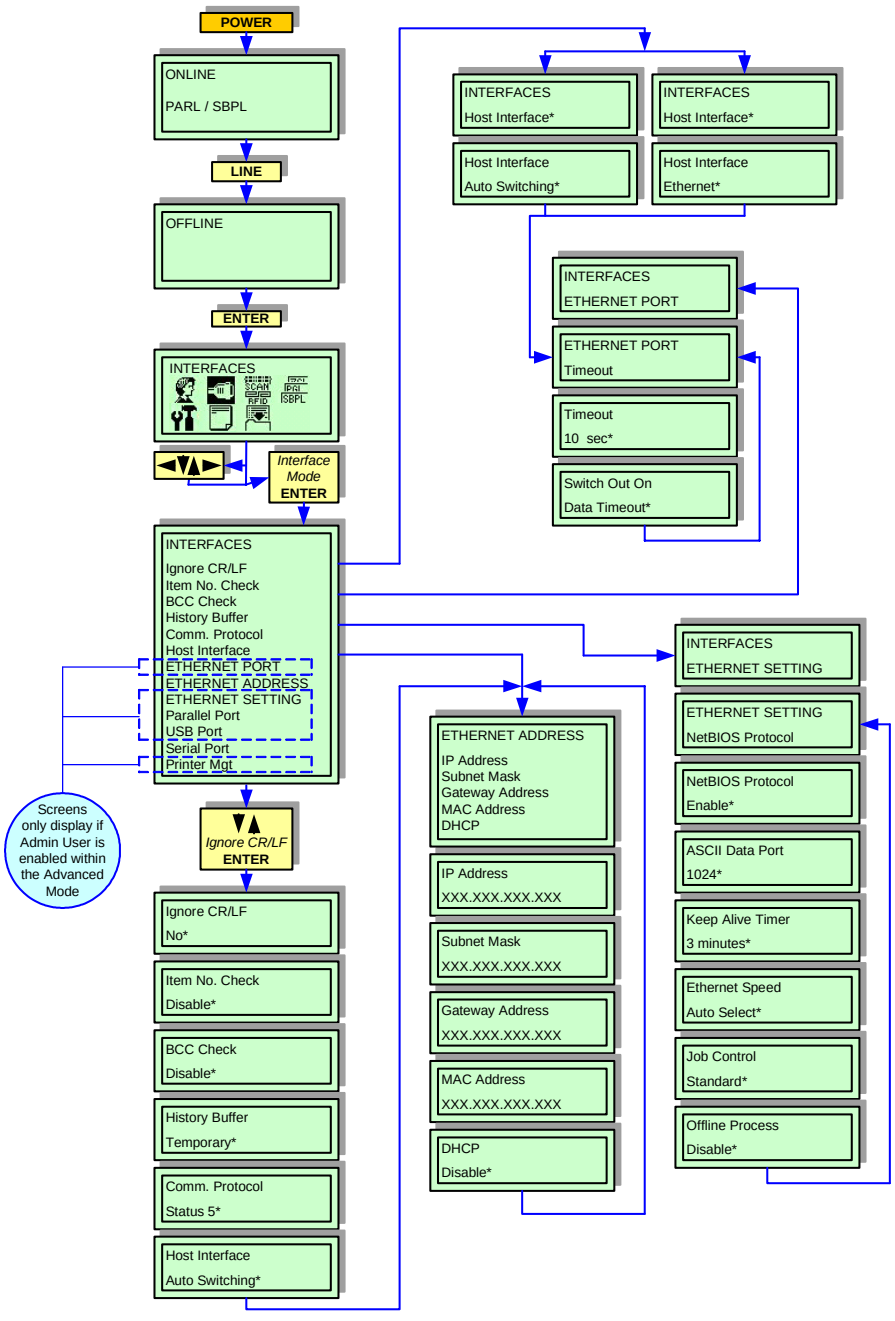

Figure 2. Overview of the Interfaces Mode menu for LAN configuration

The following tables explain the relevant options available via the LCD screen in Interfaces Mode.

Menu screen	What the options mean
INTERFACES Host Interface*	Is the menu selection screen for the Host Interface option of the INTERFACES mode.
Host Interface Auto Switching*	There are only two options relative to the serial interface, ignore all others. • **Auto Switching** - the printer automatically switches to the relative interface type and moves into the applicable menus. • **Ethernet** - factory default. Allows the operator to select the interface and the relative menus will follow.
INTERFACES ETHERNET PORT	Is the menu selection screen for the Ethernet Port option of the INTERFACES mode.
ETHERNET PORT Timeout	Is a menu subset of the Ethernet Port option. Will move into the Timeout menu.
Timeout 10 sec*	This is the value used by the printer to time out from the current port and check the other selected Port Types for data print. When the printer has not received data from the host after a certain period of time, it must timeout in order to service other ports. The factory default of **10 seconds** with an allowable range of **1** to **60 seconds**.
Switch Out On Data Timeout*	Determines when other ports are active and able to communicate with the printer when the Ethernet interface is not in use. • **Data Timeout** - factory default. The other ports (Parallel, Serial, USB) are able to send data to the printer when the timeout setting has been reached. This setting is adjustable via the display menu item Timeout. • **Session Close** - the other ports (Parallel, Serial, USB) are able to send data to the printer when the port has been closed. Example: If a RAW port of 9100 is open, the printer will not accept data from another interface until that port is closed by the host.
INTERFACES ETHERNET SETTING	Is the menu selection screen for the Ethernet Setting option of the INTERFACES mode.
ETHERNET SETTING NetBIOS Protocol	Is a transitional screen that allows entry into the Net BIOS Protocol menu.
NetBIOS Protocol Enable*	Allows determination of if the NIC will recognize the NetBIOS protocol. • **Enable** - factory default. Will recognize. • **Disable** - will not recognize.
ASCII Data Port 1024*	This options allows for the port number to be set for ASCII print jobs. The data port number must match the host computer setting. The allowable range is **0** to **65535**, and the factory default is **9100**.

Menu screen	What the options mean
Keep Alive Timer 3 minutes*	Determines the amount of time that the tcp connection will remain connected after the print job has terminated. The allowable range is **2** to **10 minutes**, and the factory default is **3 minutes**.
Ethernet Speed Auto Select*	This menu appears only if a 10/100Base-t Network Interface Card (NIC) is installed. There are five different speed modes to allow compatibility with different systmes and networks. • **Auto Select** - factory default. Tells the 10/100Base-T NIC to perform an automatic detection scheme and configure itself to be one of the other allowable options. • **10 Half Duplex** - communicates at 10 megabytes per second using half duplex. • **10 Full Duplex** - communicates at 10 megabytes per second using full duplex. • **100 Half Duplex** - communicates at 100 megabytes per second using half duplex. • **100 Full Duplex** - communicates at 100 megabytes per second using full duplex. Determines how the printer and/or NIC card respond when a job has been completed. The definition of a complete job is also determined by this setting.
Job Control Standard*	• **Standard** - factory default. The NIC card responds to the host that the job is complete when the entire print job has been accepted by the printer. • **Enhanced** - the NIC card responds to the host that the job is complete when the entire job has not only been accepted by the printer, but also completely printed. • **Off** - without synchronization between the NIC and the printer. The NIC card is simply a pass-trough and the printer tells the host when the job is complete.
Offline Process Disable*	Determines whether the printer processes incoming data when it is in an offline state. • **Disable** - factory default. The printer does not process data while offline. • **Enable** - continues to process (but not print) the current network/parallel job while the printer is offline until in a buffer-near-full state.
ETHERNET ADDRESS IP Address Subnet Mask Gateway Address MAC Address DHCP	Is the menu selection screen for the Ethernet Address option of the INTERFACES mode. Its menu options are explained in the following five menu screen descriptions.
IP Address XXX.XXX.XXX.XXX	This menu allows the IP Address to be set for the TCP/IP protocol in four three-digit segments (SEG1 through SEG4). If the IP Address is assigned by Bootp, ARP, or DHCP it is dynamic and read only. The factory defaults for SEG1 through SEG4 are **000**, **000**, **000**, and **000**. Note: When changing the IP Address, the printer resets the Network Interface Card (NIC) when the printer is placed online. When the printer resets the NIC, the LCD displays DO NOT POWER OFF. After the NIC has completed initialization, the LCD displays E-NET INIT to signal that the NIC andd printer are in initialization process. When both the NIC and printer have completed the initialization, theLCD displays E-NET READY.
Subnet Mask XXX.XXX.XXX.XXX	Allows the Subnet Mask to be set for the TCP/IP protocol in four three-digit segments (SEG1 through SEG4). If the Subnet Mask is assigned by Bootp, Arp or DHCP, it is dynamic and read only. The defaults for the SEG1 through SEG4 are **000**, **000**, **000**, and **000**. Note: When changing the Subnet Mask, the printer resets the NIC when the printer is placed online. When the printer resets the NIC, the LCD displays DO NOT POWER OFF. After the NIC has completed its initialization, the LCD displays E-NET INIT to signal that the NIC and printer are in the initialization process. When both the NIC and printer have completed initilization, the LCD displays E-NET READY.

Menu screen	What the options mean
Gateway Address XXX.XXX.XXX.XXX	Allows the Gateway Address to be set for the TCP/IP protocol in four three-digit segments (SEG1 through SEG4). If the Gateway Address is assigned by Bootp, ARP, or DHCP, it is dynamic and read only. The defaults for the SEG1 through SEG4 are **000**, **000**, **000**, and **000**. Note: When changing the Gateway Address, the printer resets the NIC when the printer is place online. When the printer resets the NIC, the LCD displays DO NOT POWER OFF. After the NIC has completed its initialization, the LCD displays E-NET INIT to signal that the NIC and printer are in the initialization process. When both the NIC and printer have completed initialization, the LCD displays E-NET READY.
MAC Address XXX.XXX.XXX.XXX	This is an informational screen that displays the manufacturer's assigned number. This number is unique for each NIC.
DHCP Disable*	Allows the DHCP protocol to be enabled or disabled through this menu. The factory default is **Disable**. Note: Consult with your systems administrator for the appropriate setting.

Once the LAN settings are correct for your requirements, the installation of the LAN interface can be considered complete.

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