

GLT2362 Dot Matrix Printer B/W A4

Application

You can use the printer described in this document (Epson LQ300+) to print protocols.

The printer can be connected to an RS232 serial interface or a Centronics parallel interface.



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Änderungen vorbehalten - Contents subject to change - Sous réserve de modifications - Reservado el derecho a modificación - Wijzigingen voorbehouden - Con riserva di modifiche - Innehåll som skall ändras - Změny vyhrazeny - Zmiany zastrzeżone - Возможны изменения - A változtatások jogát fenntartjuk - 保留未经通知而改动的权力

Important Information Regarding Product Safety

Safety Instructions

This data sheet contains information on installing and commissioning the product "GLT2362". Each person who carries out work on this product must have read and understood this data sheet. If you have any questions that are not resolved by this data sheet, you can obtain further information from the supplier or manufacturer.

If the product is not used in accordance with this data sheet, the protection provided will be impaired.

Applicable regulations must be observed when installing and using the device. Within the EU, these include regulations regarding occupational safety and accident prevention as well as those from the VDE (Association for Electrical, Electronic & Information Technologies). If the device is used in other countries, it is the responsibility of the system installer or operator to comply with local regulations.

Mounting, installation and commissioning work on the devices may only be carried out by qualified technicians. Qualified technicians are persons who are familiar with the described product and who can assess given tasks and recognize possible dangers due to technical training, knowledge and experience as well as knowledge of the appropriate regulations.

Legend



WARNING

Indicates a hazard of medium risk which can result in death or severe bodily injury if it is not avoided.



CAUTION

Indicates a hazard of low risk which can result in minor or medium bodily injury if it is not avoided.



NOTICE

Indicates a hazard of medium risk which can result in material damage or malfunctions if it is not avoided.



NOTE

Indicates additional information that can simplify the work with the product for you.

Notes on Disposal

For disposal, the product is considered waste from electrical and electronic equipment (electronic waste) and must not be disposed of as household waste. Special treatment for specific components may be legally binding or ecologically sensible. The local and currently applicable legislation must be observed.

Commissioning

**NOTICE**

Only qualified persons may configure the printer.

Pushbuttons and Displays on the Printer's Operator Panel
Tear Off (Font) displays

- Flashes when you can tear off the last sheet of continuous paper; otherwise, the displays show the selected font.

LF/FF key

- Feeds paper line by line when pressed and then released.
- Outputs a single page or feeds the continuous paper to the next printing start position when pressed and held.

Paper Out display

- Lights up when there is no paper in the selected paper supply or when the paper is not loaded properly.
- Flashes when the paper has not been completely printed or when there is a paper jam.

Tear Off (Font) key**

- Feeds continuous paper to the tear-off position.
- Back-feeds continuous paper away from the tear-off position to the start printing start position.

Load/Eject key

- Loads a single piece of paper.
- Ejects a single piece of paper when one is fed in.

Pause key

- Interrupts the printing process and continues the job during the next printing process. If you press and hold this key for three seconds, the printer switches to Micro Adjust mode*. Press the key again to deactivate this mode.

***Micro Adjust mode**

- When you press and hold this key for three seconds, the printer switches to Micro Adjust mode. In this mode, you can press the LF/FF and Load/Eject keys to set the printing start position and tear-off position.

****Font selection**

- In the Micro Adjust mode, you can select the print font by pressing the Tear Off key. The status LEDs have illuminated, dark and flashing displays and show the selected font.

Pause display

- Lights up when the printing process has been interrupted.
- Flashes when Micro Adjust mode is activated.*
- Flashes when the print head has overheated.

Selecting an Internal Printer Font

Follow the steps below to select an internal printer font using the keys on the operator panel:

- ▶ Make sure that the printer is not printing. If the printer is currently printing, wait until it has finished printing.
- ▶ Press and hold the Pause key for three seconds to put the printer in Micro Adjust mode. The Pause display begins to flash. The three Tear Off (Font) displays show the font that is currently selected.
- ▶ Press the Tear Off (Font) key repeatedly. After every print job, the operator panel shows one of the available internal printer fonts and a font sample. Press the Tear Off (Font) key repeatedly until the font that you want is displayed. Your selection stays in effect until you change it again.



NOTE

Normally, the settings that you make in an application overwrite those that you make using the printer's operator panel. To achieve the best results, select the font and character spacing in your application. The Tear Off (Font) key does not allow you to select the following fonts directly: OCR-B, Orator, Orator-S, Script-C, Roman-T and Sans Serif H. In order to select one of these fonts, first switch the printer to SETUP mode and then save the desired font as "Others". Now you can use the Tear Off (Font) key to select the Others option. Barcode fonts cannot be selected from the operator panel.

Printer Standard Settings

Many printer functions can be controlled via the standard settings. You can usually make these settings in the application or printer driver; sometimes, however, you may need to change a standard setting using the SETUP mode on the printer's operator panel.

The following table lists the settings and options available in SETUP mode.

Settings	Options
Page length for tractor*	Length in inches: 3, 3.5, 4, 5.5, 6, 7, 8, 8.5, 11, 70/6, 12, 14, 17
Skip-over page perforation	On, Off
Auto tear off	On, Off
Auto second feed	On, Off
Print direction	Bidirectional, unidirectional, automatic
Operating system	ESCIP2, IBM 2390 Plus
Zero display	0, 0
Quick draft	On, Off
I/F mode	Automatic, parallel I/F, serial I/F
Waiting period for automatic I/F recognition	10 seconds, 30 seconds
Baud rate	19200, 9600, 4800, 2400, 1200, 600, 300 BPS
Parity	None, Odd, Even, Ignore
Parallel I/F bidirectional mode	On, Off
Word length	8 bit, 7 bit
Package mode	Automatic, Off
Character table	Italic, PC 437, PC 850, PC 437 Greek, PC 853, PC 855, PC 852, PC 857, PC 864, PC 866, PC 869, MAZOWIA, Code MJK, ISO 8859-7, ISO Latin IT, Bulgaria, PC 774, Estonia, ISO 8859-2, PC 866 LAT, PC 866 UKR, PC APTEC, PC 708, PC 720, PC AR864, PC 860, PC 863, PC 865, PC 861, BRASCII, Abicomp, Roman 8, ISO Latin 1, PC 858, ISO 8859-1 5, PC 771
Character spacing	10 cpi, 12 cpi, 15 cpi, 17 cpi, 20 cpi, Proportional
International character set for italic	Italic U.S.A., Italic France, Italic Germany, Italic U.K., Italic Denmark 1, Italic Sweden, Italic Italy, Italic Spain 1
Font face	OCR-B, Orator, Orator-S, Script C, Roman T (PS), Sans Serif H (PS)
Auto carriage return (IBM 2390 Plus)**	On, Off
A.G.M. (IBM 2390 Plus)**	On, Off
Waiting time for manual feed	1 second, 1.5 seconds, 2 seconds, 3 seconds, other
Acoustic signal	On, Off
Roll paper	On, Off

* The options available may vary depending on the country where the printer was purchased.

** These settings are in effect only when the IBM 2390 Plus emulation is selected.

Changing Printer Standard Settings

Follow the steps below to activate SETUP mode and change the standard settings, e.g. the printer's interface configuration:

To print out the instructions for selecting the desired language or SETUP mode, you will need five to six single sheets in A4 format or five to six pages of continuous paper, each at least 279 mm long and 210 mm wide.

- ▶ Make sure that paper has been inserted and that the printer is switched off.



NOTICE

Wait at least five seconds after switching the printer off before turning it back on. Otherwise, the printer could be damaged.

- ▶ Press and hold the Tear Off (Font) key, and switch the printer on. The printer switches into SETUP mode and prints the instructions for selecting the desired language (one page).
- ▶ Follow the instructions for selecting the language in which you wish to have the instruction sheets printed. To do this, the LF/FF key must be pressed.
- ▶ The printer prints the list with the current settings (one page) when you press the Tear Off (Font) key.
- ▶ Press the Tear Off (Font) key again. The printer prints the available menus (three to four pages) in the language you selected. The printed instruction sheets contain a list of all settings and explain how you can change the settings using the operator panel displays. To select the menu, press the Tear Off (Font) key until the corresponding display combination of status LEDs lights up. To make changes from within the menu, press the LF/FF key repeatedly until you have reached the desired setting.
- ▶ After you have made all settings, switch off the printer and deactivate the SETUP mode. All settings you make stay in effect until you change them again.
- ▶ Switch off the printer as soon as it has finished printing. The settings are adopted; the printer is ready to use.

Connecting the Printer to the DDC3000

Accessories (not included in delivery)

MRP008 Connection cable

MRP008 data cable	DDC3000	Signal
Lead 0	Terminal 60	GND
Lead 1	Terminal 59	RX
Lead 2	Terminal 58	TX

- Enter "1" for printer in the software menus M70 plant message or M113 system message of DDC3000 for printing a message in parameter 8616 message destination, 1090 sym: sub-bus, 1091 sym: component, 1092 sym: Z-bus or 1093 sym: sensors.
- Configure the serial interface on the back of the printer for parameter 2031.
- Set the diagnostic socket serial interface to free for parameter 2032.

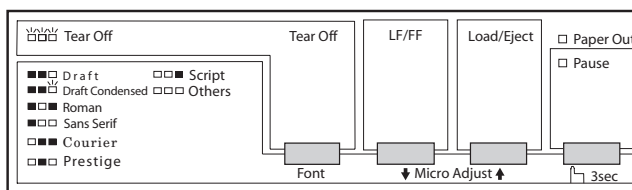
Important printer settings

Setting	Option
Operating system	ESC/P2
I/F mode	Serial I/F
Baud rate	4800
Parity	None
Word length	8 bit
Parallel I/F bidirectional mode	Off
Character table	PC 437

Connecting the Printer to the BMS via the Serial Interface

Accessories

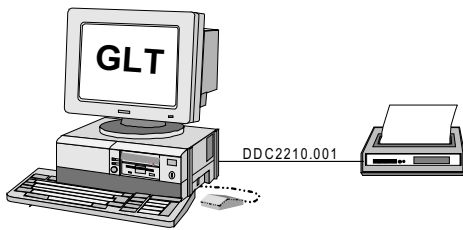
DDC2210.001 Connection cable



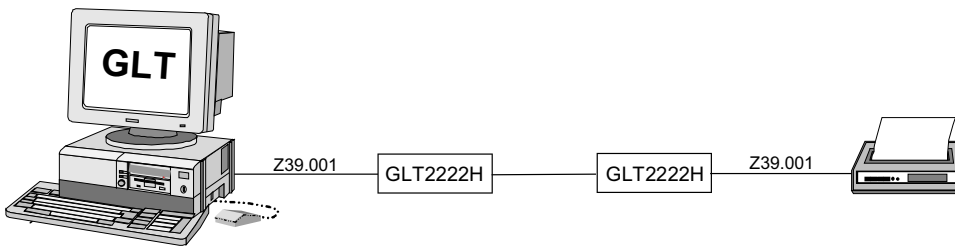
Important printer settings for serial use

Setting	Option
Operating system	ESC/P2
I/F mode	Serial I/F or automatic
Baud rate	9600 for Photon BMS; 19200 for Neutrino BMS
Parity	None
Word length	8 bit
Parallel I/F bidirectional mode	Off
Character table	PC 437

Connection via Standard Line Driver

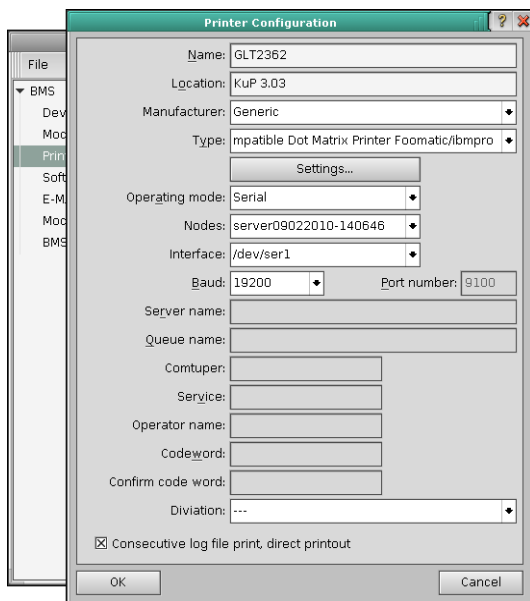


Setting on the BMS

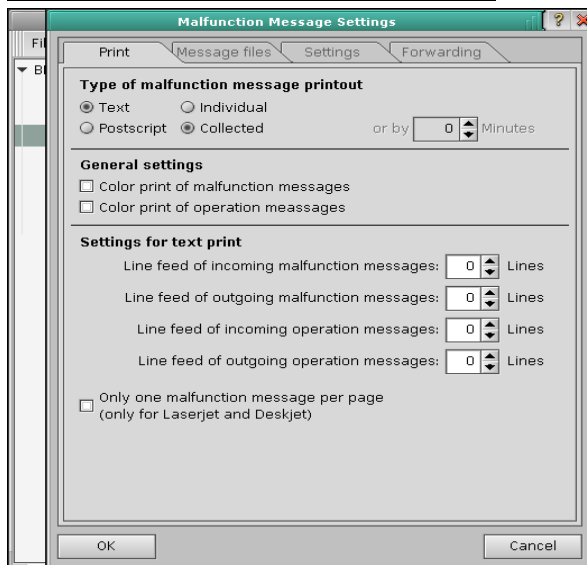
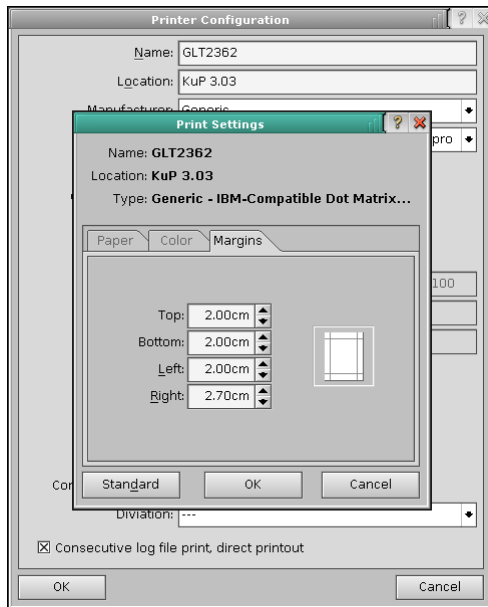
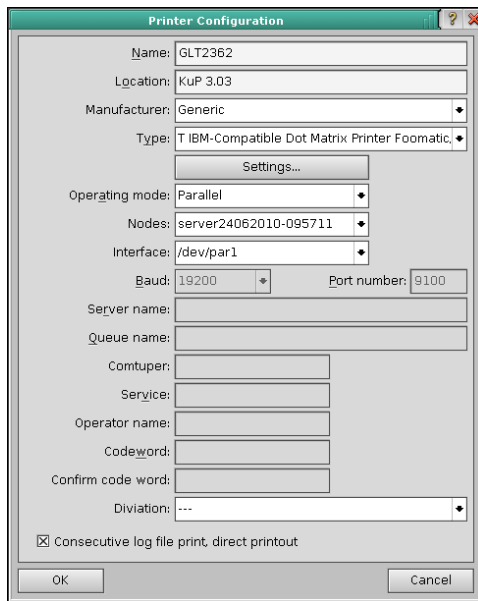


Configuration

Serial connection



Parallel connection



Requirements

The printer can be connected locally via the serial or parallel interface. The following requirements must be met in order to install the printer.

- You must work with the maintenance options (“Installation level: Maintenance options”). To do this, the maintenance dongle must be plugged into the BMS computer. Alternatively, you can install the printer using the optional configuration module (SM83; with the customer dongle), in which case you do not need a maintenance dongle.
- Software version 9.04 or higher must be installed on the Neutrino BMS.
- The printer must be connected to the power supply using the supplied power cable.



NOTE

Further information on the printer, such as the operating environment, printing resolution and the printer cartridges that are to be used, can be found in the technical data sheet.

Setting Up the Printer as a Local Printer

The printer must be connected to the Neutrino BMS using a serial or parallel cable (max. one printer). To print documents from the Neutrino BMS (requirement: Neutrino BMS software version 9 or higher), you must make the following settings in the BMS menu “Tools > Configuration”:

- ▶ Open the “BMS” function group and select “Printer”.
 - The “BMS Configuration” window appears. Select “New” from the “Edit” menu. The “Printer Configuration” window then appears, where you make the following entries.
- ▶ Enter the name and location of the printer. You are free to enter whatever you want.
 - Once installed, the printer can be more easily identified using these specifications.
- ▶ Select the manufacturer “Generic” from the list provided.
- ▶ Select type “IBM-compatible dot matrix printer foomatic/ibmpro” as the printer driver.
- ▶ Select “Serial” or “Parallel” as the operating mode.
- ▶ Select the host name of the BMS as the node. The BMS automatically enters its host name (e.g. “server15062009-152709”). The printer can be addressed by other BMS units or operator stations within the network using the host name (if correctly configured).
- ▶ Select as the interface “dev/ser1” for a serial connection or “dev/par1” for a parallel connection.
- ▶ Confirm your entries with OK.

The configuration is then saved. The BMS must be restarted for the configuration to take effect. The printer can be used after the BMS is restarted.



NOTE

The printer can also be addressed by other BMS computers within the network using the host name. The print image can be adjusted using the specific settings for the printer (“Printer configuration” > “Settings” > “Print settings”): The printer driver works on the assumption that the pages do not have margins. Because of this, you must first print a test page and then adjust the margins as needed. Click “Standard” if you want to reset the margins to the default settings.