GL100 series Main Firmware Update Procedure
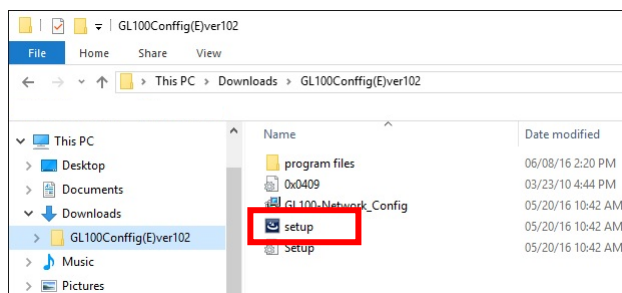
1. Notes of the main firmware update

• This document describes to update the main firmware of the GL100-N or GL100-WL. It cannot be used in the other models.

• The name of the file for the main firmware is the following. Other types of files cannot be used to update the firmware.
  File name: GL100_Main_Vxxx.hxf
  (The xxx is a three-digit number that indicates the version number. Ex.: 100 is the version 1.00.)

• During the update, it must not turn off the power of the GL100, such as disconnecting the USB cable. If the GL100 has the power failures during the process, the GL100 may be in condition of unusable and unrecoverable.

• The GL100 needs to be connected to a PC using the USB cable. The firmware update cannot be executed with the LAN connection even if the GL100-WL has the WLAN function.

• The GL100-Nerwork_Config software version 1.02 or later is required. The software needs to be installed to a PC. Then the USB driver needs to be installed using the software. The latest version of the software is available on the website.
  URL: http://www.graphteccorp.com/support/software/instruments.html

• The GL100 condition settings including the measurement, interface and others will be reset to the factory default after the firmware is updated. It is able to save the condition settings to the microSD memory card using the GL100-Network_Config software. It can be restored to the GL100 from the microSD memory card after the firmware has updated.

• When GL100-WL is used in standalone after GL100 has been used in WLAN with GL840/GL240 or access point, the GL100-WL needs to be restarted using method of power on.

2. Preparing the main firmware update

2-1. Installing the GL100-Network_Config software

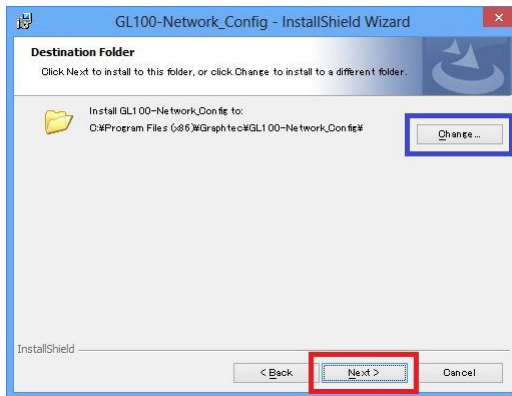(1) Extract files from the downloaded file for the software. Files appear as the following.

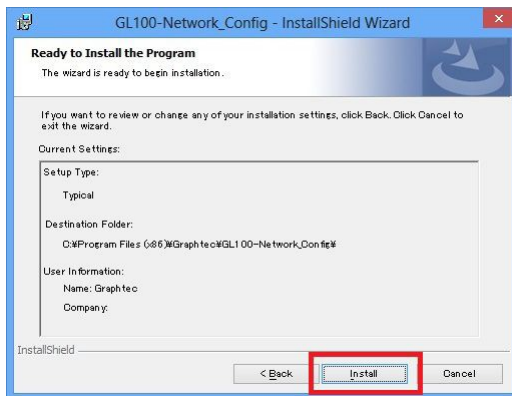Double-click the "setup" file icon for installing the software.

(2)　The following wizard appears. Then click the [Next] button.

(3)　The following message appears. Then click the [Next] button.
When destination of files need to be changed, click the [Change ...] button. Then specify the
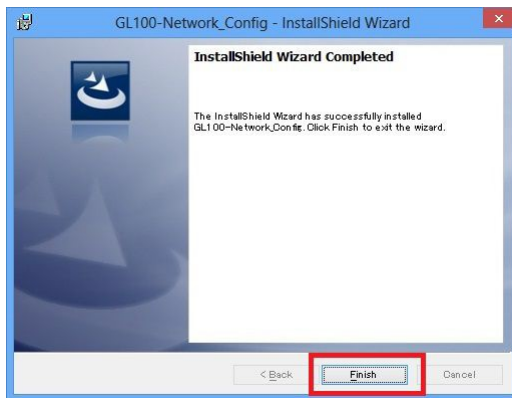destination. Click the [Next] button after destination is specified.

(4)　The following screen appears. Then click the [Install] button.

(5)　Installation is started. Then the following screen appears while the progress of process.

(6)   The following screen appears after process of installing the software is completed. Then click the [Finish] button.
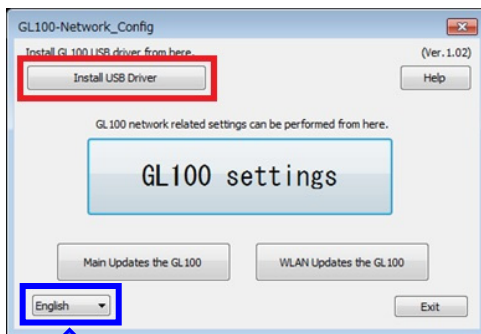

Installing the GL100-Network_Config software has completed.

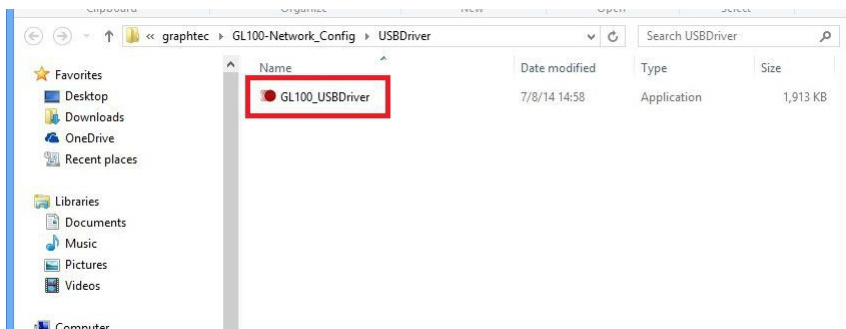2-2. Installing the USB driver for the GL100

Note: Log-in user of a PC needs to be in member of the Administrator. (Account type of the log-in user is the Administrator.)

(1)   Start the GL100-Network_Config software on a PC.

(2)   The following screen appears. Then click the [Install USB Driver] button.

The display language can be selected in English, French, German, Chinese, Korean or Japanese at this button.
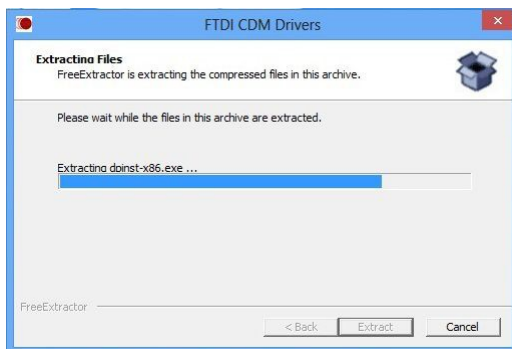
(3)   The following screen appears. Then double-click the "GL100_USBDriver" file icon.

(4) The following screen appears. Then click the [Extract] button.

(The following screen appears while the progress of process.)

The following screen appears while the progress of process.

(5) The following screen appears. Then click the [Next] button.

(6) The following screen appears after process of installing the software is completed. Then click the [Finish] button.

Installing the USB driver has completed.

2-3. Saving or loading the condition settings of the GL100

Note: The GL100-Network_Config software and the microSD memory card are required. The microSD memory card needs to be installed on the GL100.
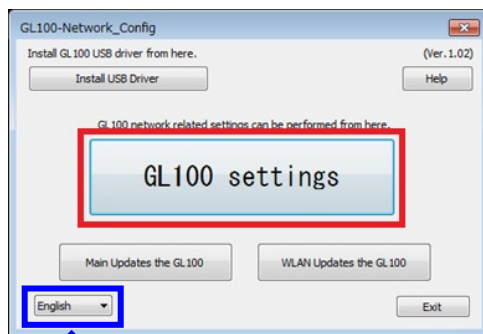
(1) Connect the GL100 to a PC using the USB cable.

(2) Turn on the GL100 by pressing the [MENU] key on the GL100.
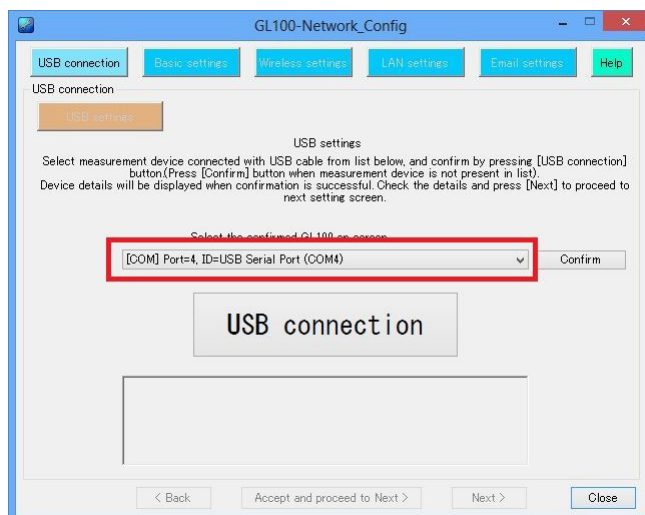

(3) Start the GL-Network_Config software in a PC.

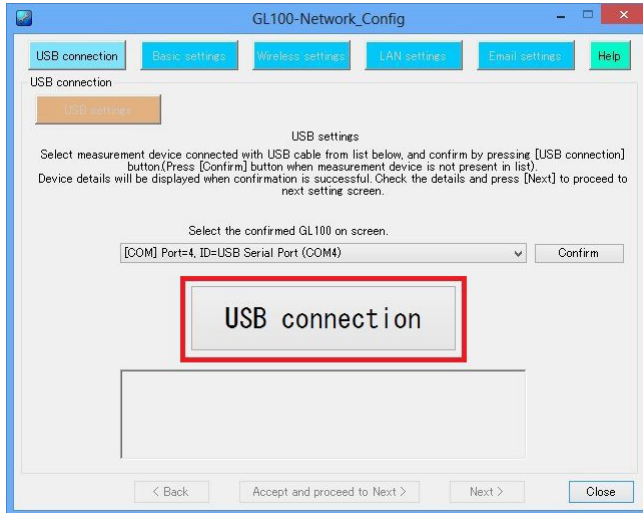(4) The following screen appears. Then click the [GL100 setting] button.

The display language can be selected in English, French, German, Chinese, Korean or Japanese at this button.
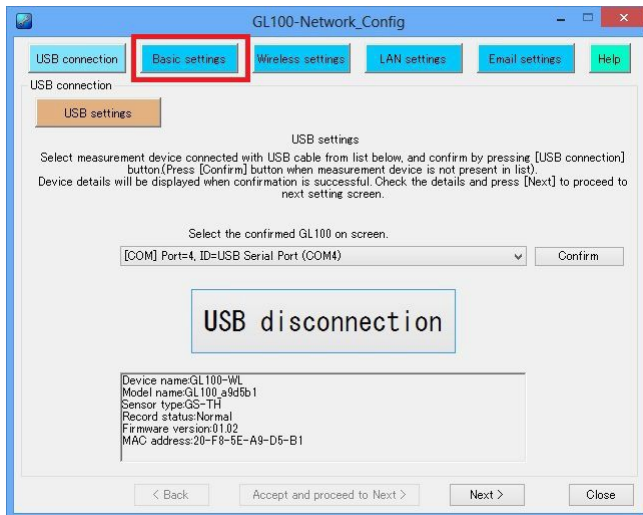
(5) The following screen appears. Confirm the displayed port number as the "[COM] Port=4, ID=USB Serial Port (COM4)" on the "Select the confirmed GL100 on screen." column. The port number will be assigned automatically by a PC and varies by configuration of a PC.
If the port number is not displayed, the USB driver might not be installed. Re-start this software after installing the USB driver.
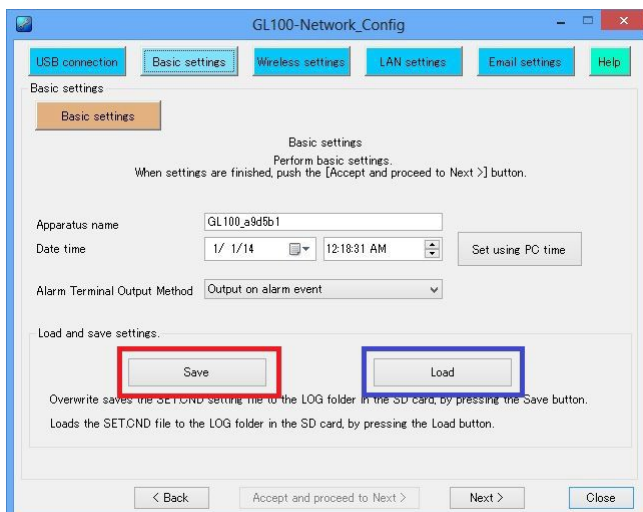
(6)   The following screen appears. Then click the [USB connection] button.

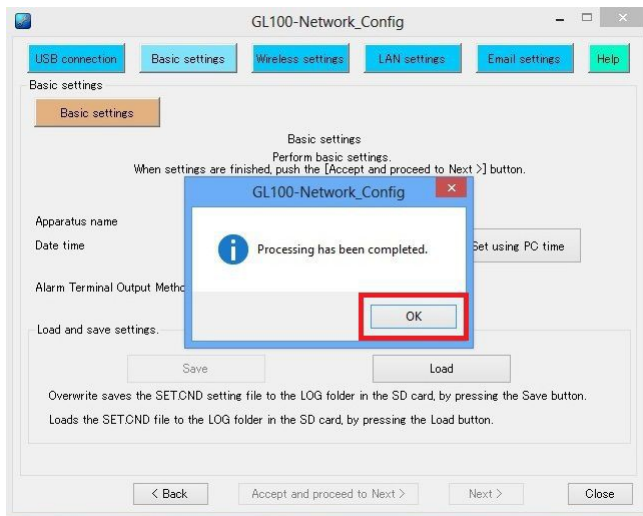(7)   The following screen appears. Then click the [Basic settings] button.

(8)   Confirm the microSD memory card is installed to the GL100. Then press the [ENTER] key of the GL100 for displaying the Free-running screen.
The following screen appears. Then click the [Save] button for saving the settings to the microSD memory card, or click the [Load] button for loading the settings from the microSD memory card.

(9) The following message appears. Then click the [OK] button.
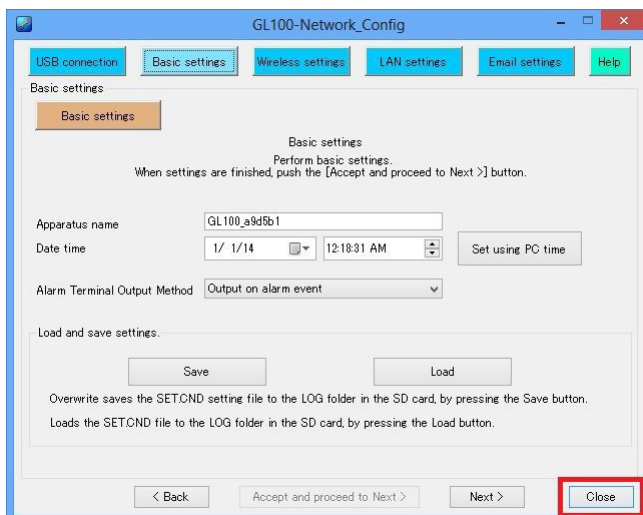
Note: When the "Save" is selected, the condition settings will be saved to the microSD memory card on the GL100 as the "SET.CON" file after the [OK] button is clicked. If there is the "SET.CON" file saved previously on the microSD memory card, it will be overwritten.
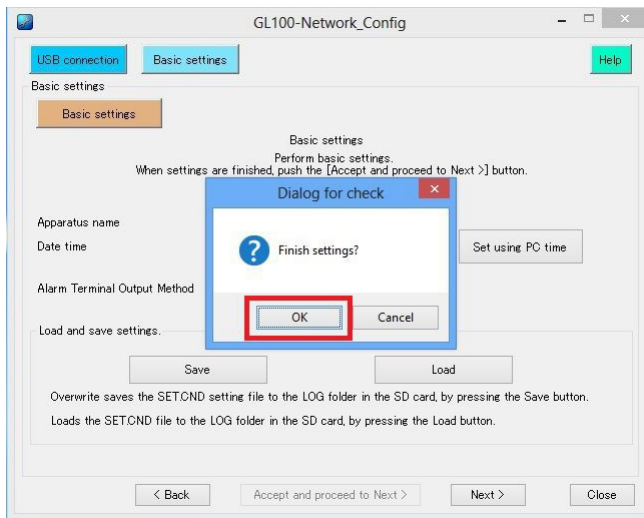

If the microSD memory card is not recognized by the GL100, the following message is displayed. Clicks the [OK] button and then re-install the microSD memory card to the GL100.

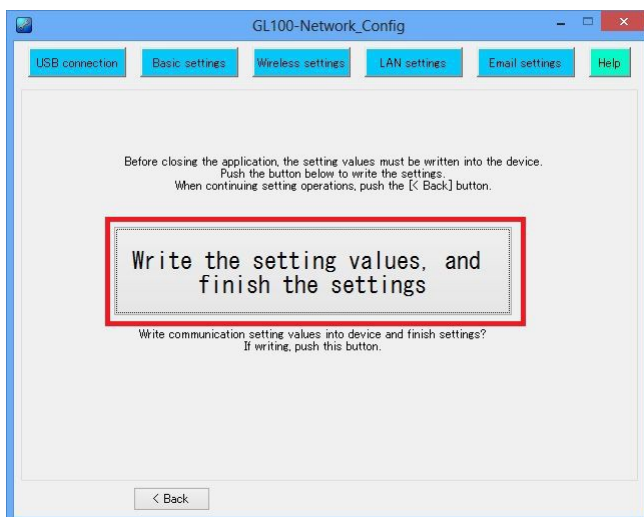(10) The following screen appears. Then click the [Close] button.

(11) When the GL100-N is connected, the following screen appears. Then click the [OK] button. If the GL100-WL is connected, refer the section (12).
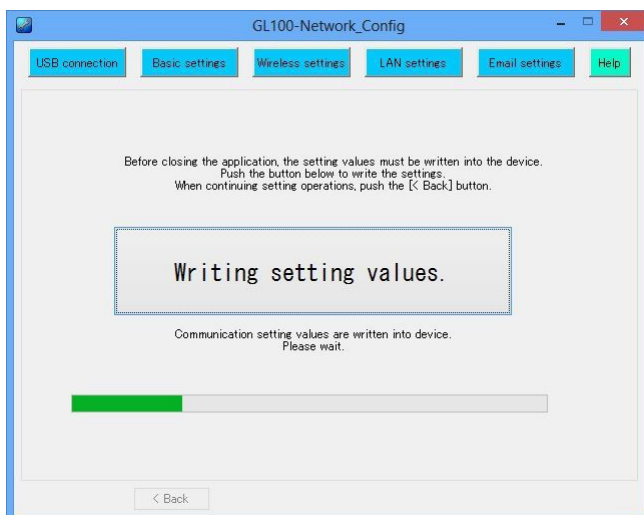

Then the first screen of the GL 100-Network_Config software appears.

(12) When the GL100-WL is connected, the following screen appears. Then clicks the [Write the setting values, and finish the settings] button for synchronizing the GL100 with the software.

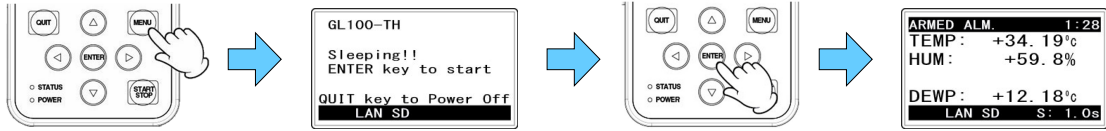Then the following screen appears while the progress of process.

When the process is completed, the first screen of the GL 100-Network_Config software appears.

(13) When necessary process as the firmware update has completed, close the software.
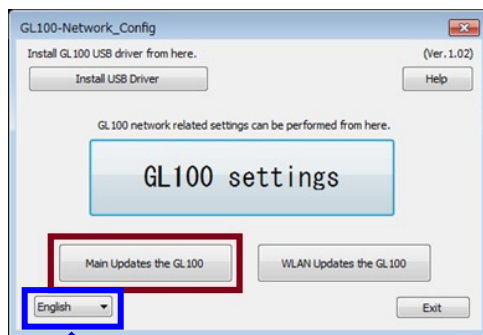
3. Updating the main firmware

(1) Connect the GL100 to a PC using the USB cable.

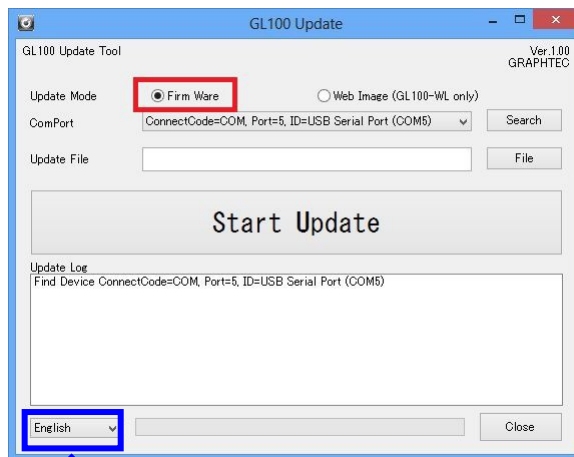(2) Turn on the GL100 by pressing the [MENU] key on the GL100.

(3) Start the GL-Network_Config software in a PC.

(4) The following screen appears. Then click the [Main Updates the GL100] button.
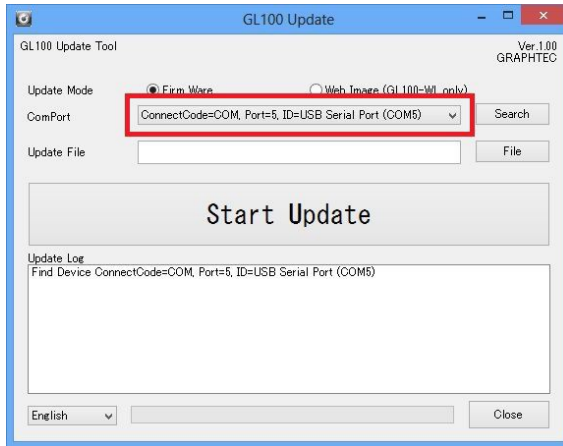

The display language can be selected in English, French, German, Chinese, Korean or Japanese at this button.

(5) The following screen appears. Then click the option button of the [Firmware].
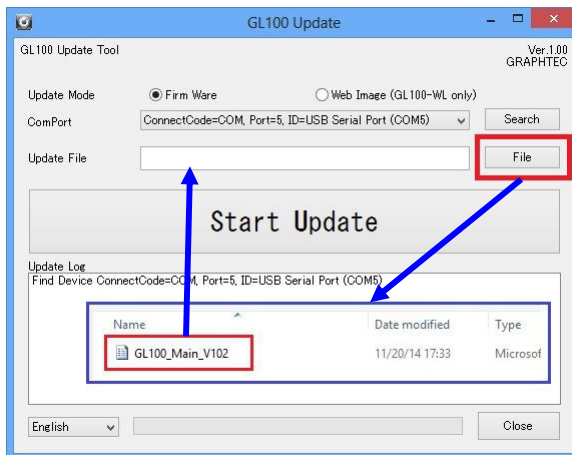

The display language can be switched to English or Japanese at this button.
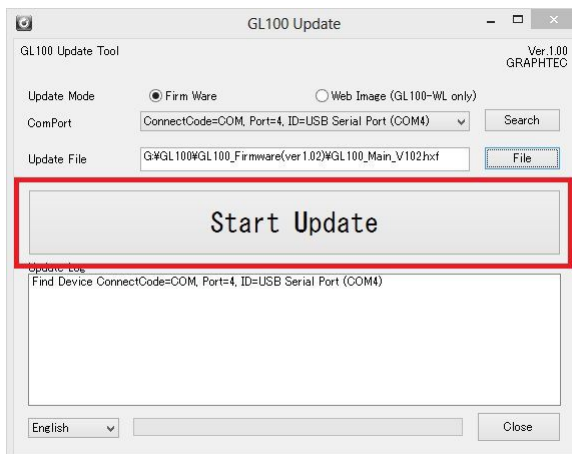
(6)　The following screen appears. Confirm the displayed port number as the "ConnectCode=COM, Port=5, ID=USB Serial Port (COM5)" on the COM Port column. The port number will be assigned automatically by a PC and varies by configuration of a PC.
　If the port number is not displayed, click the [Search] button. When the port number is not displayed after search is executed, the USB driver might not be installed. Re-start this software after installing the USB driver.

(7)　The following screen appears. Then click the [File] button and then browse the file. The file name of the firmware for the GL100 is the "GL100_Main_Vxxx.hxf". The "xxx" of the file name varies by the version. Select the firmware file.
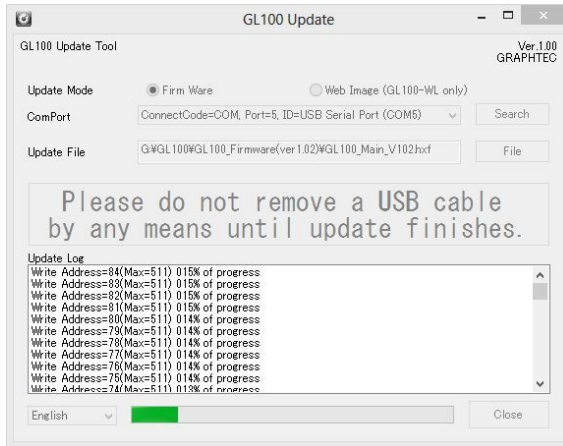
(8)　The following screen appears. Then verifies the displayed firmware file name on the "Update File" column. It must be the correct file.
　Then click the [Start Update] button for downloading the firmware file to the GL100.
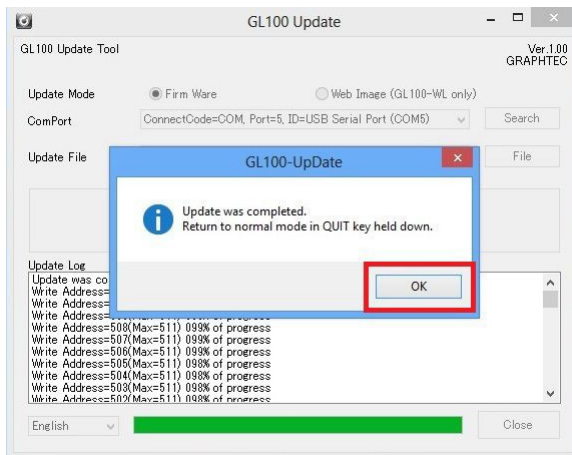
(9) Downloading firmware is started, and then the following screen is displayed while downloading is progressing.

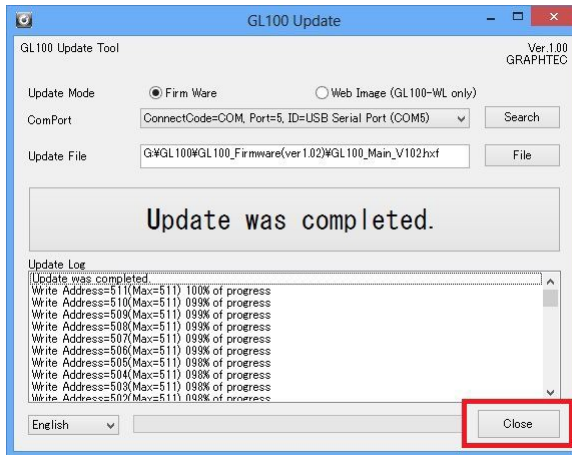> Note: Should not disconnect the USB cable from the GL100 or PC before downloading firmware is completed.

(10) The following message is displayed after downloading firmware file is completed. Then click the [OK] button for closing the message box.

(11) Continue to press the [QUIT] key on the GL100 until appearing the next screen. It is for terminating the firmware update mode on the GL100. It takes approx 5 seconds. The screen varies by the configuration of the GL100.

(12) The following screen appears. Then click the [Close] button for closing the firmware update mode on the GL100-Network_Config software.

The process of updating firmware has completed.

When the measuring condition setting needs to be restored to previous setting, refer the section 2.3 Saving or loading the condition settings.
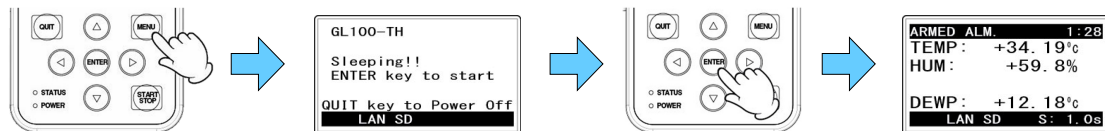
4. Setting the non-communication disconnect function

When the GL100-WL is set to the station mode for wireless LAN and the it is connected to other devices by WLAN, GL100-WL makes communication at necessary time.
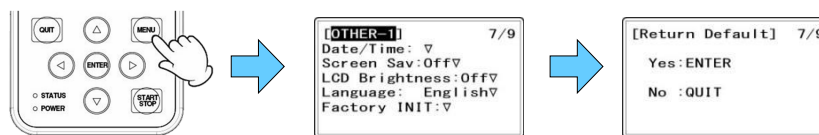In the firmware version 1.20 or later, it has improved that the connection with other devices is interrupted. It can be enabled by setting of the "Keep Alive" using either of the following method.

4-1. Initializing the GL100

(1) Turn on the GL100 by pressing the [MENU] key on the GL100.

(2) Open the menu by pressing the [MENU] key on the GL100. Press the [MENU] key until the "OTHER 1" menu appears. Select "Factory INIT" on the OTHER 1 menu and then execute it.
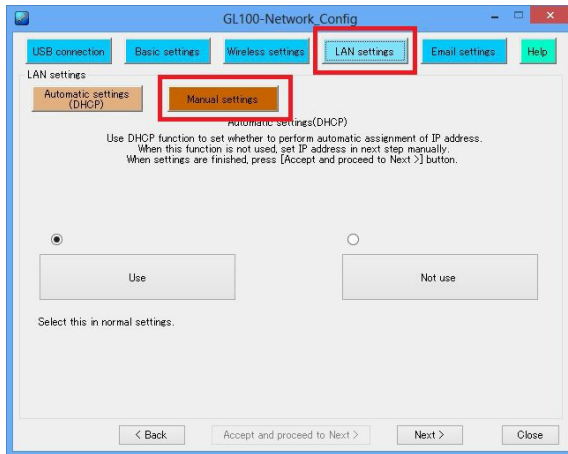

When the initializing is executed, the condition setting of GL100 is changed to the factory default. Condition setting needs to be restored to previous setting, refer the section 2.3 Saving or loading the condition settings.
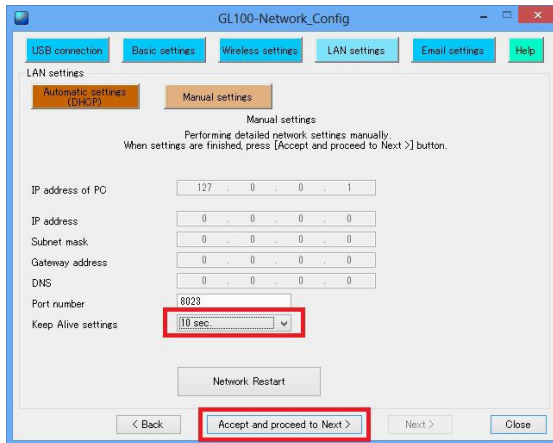
4-2. Set it by the GL100-Network_Config software

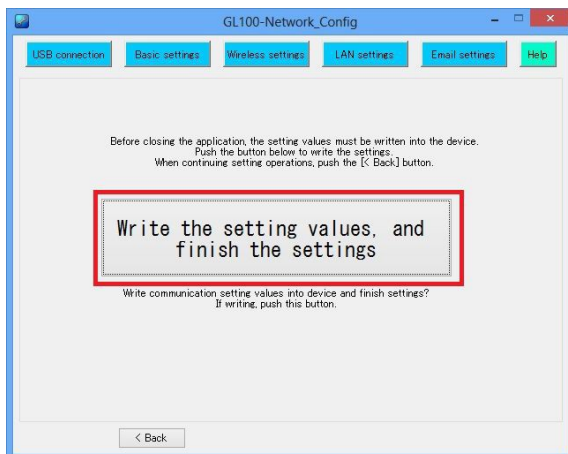(1) Start the GL100-Network_Config software and then connect the GL100.

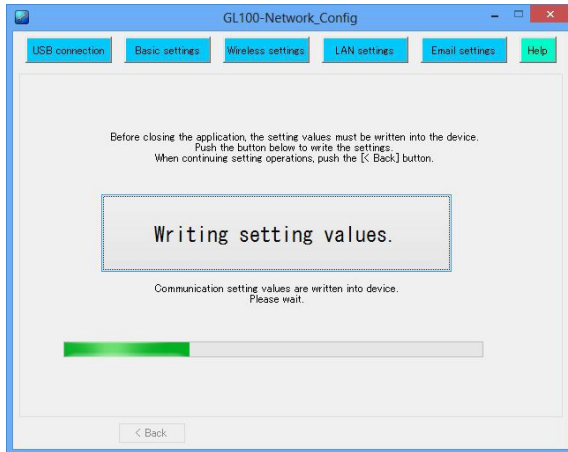(2) Click the [LAN setting] button. The following message appears. Then click the the [Manual setting].

(3) The following message appears. Set the "Keep Alive setting" to "10 sec.". Then click the [Accept and proceed to Next >] button.

(4) The following message appears. Set the [Write the setting values, and finish the settings] button.

When the process is completed, the first screen of the GL 100-Network_Config software appears.

The end of this document.