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**FORCE GAUGE FGV-X SERIES**  
**Add-in software for EXCEL**

**Toriemon FGV-X and FGV-HX INSTRUCTION**  
**MANUAL**

**NIDEC-SHIMPO CORPORATION**

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## 1. Introduction

Congratulations on your purchase of the "FGV-X series Force Gauge".

This software (referred to as "Toriemon") is provided free of charge for the FGV-X series force gauges. The software works with Windows 2000/XP environments.

Toriemon is a communication software designed with EXCEL add-in format. Microsoft Excel (Ver.2000 or up) must be installed on your PC in. Please read other instruction manuals for EXCEL and Force gauge.

## 2. Setup

### 2.1 Package contents

- Toriemon FGV-X Instruction Manual
- Setup Package (toriemonFGCB\_English\_V2.00.msi)

### 2.2 Software Installation

Installation for Toriemon can be easily accomplished by using the setup wizard.

Provided is a setup package that will guide you with the installation process. First run the file named "toriemonFGCB\_English\_V200.msi". A series of dialogue boxes will appear, which will guide you to the installation process.

Setup is completed after the done when the message appears on the screen.

After setup is completed, do add-in from EXCEL add-in manager.

A. Open the Installation Package

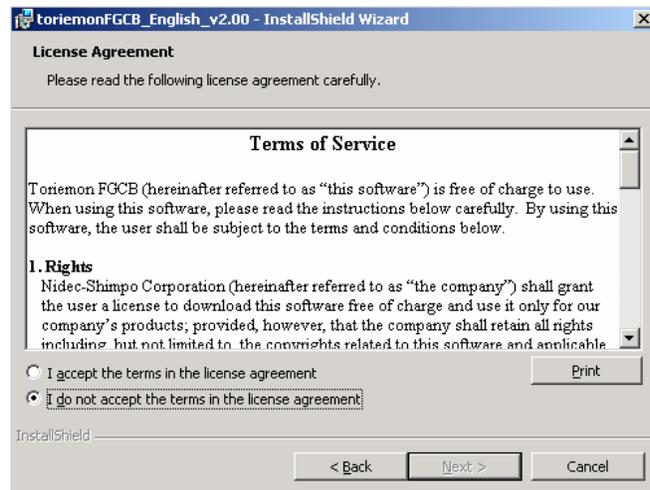


B. Follow the instruction provided by the installation wizard. Click "Next" to proceed.

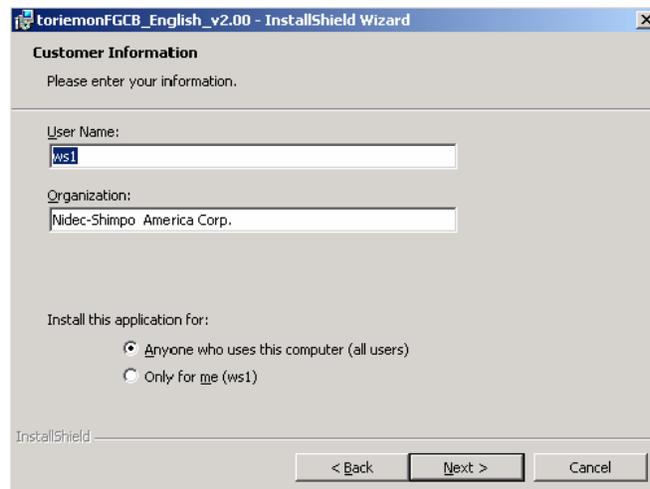


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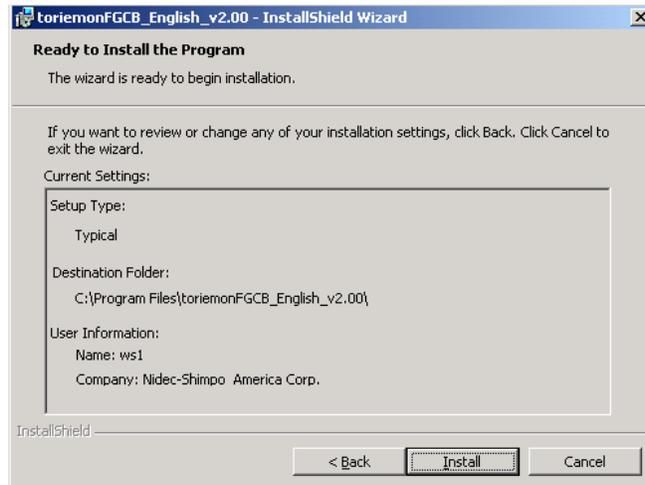
- C. Read the Terms License Agreement carefully and select “I accept the terms in the license agreement.” To proceed.



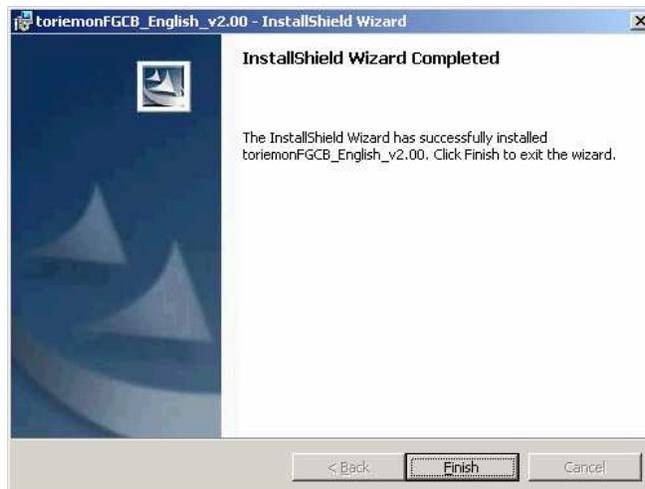
- D. Provide the user name and organization. Select who can access the installed application.



E. Select install to begin the software installation.



F. A dialog box will appear indicating that the software installation is completed.



## 2.3 Install add-in

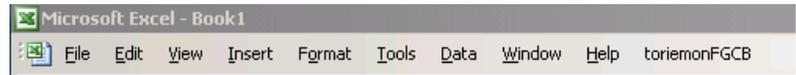
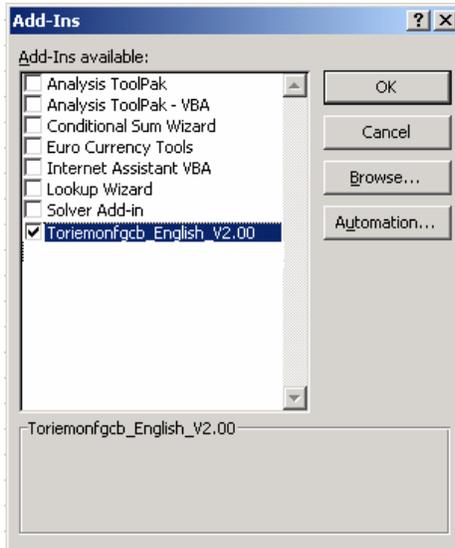
Open Microsoft Excel

Select [tool]-[add-in] on EXCEL and start add-in manager.

Click [Reference] on the dialog box and select the add-in file 'Toriemonfgcb\_English\_V2.00' from the list as shown on the screen below.

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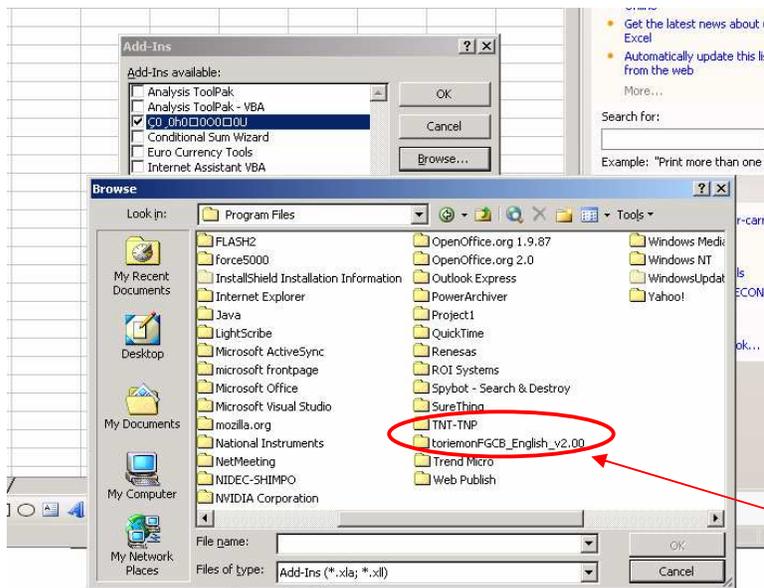
Click [OK]. Toriemon will be added and installed on the Microsoft EXCEL menu bar.



Microsoft Excel Menu Bar

Microsoft Excel Add-in dialog box under Tools

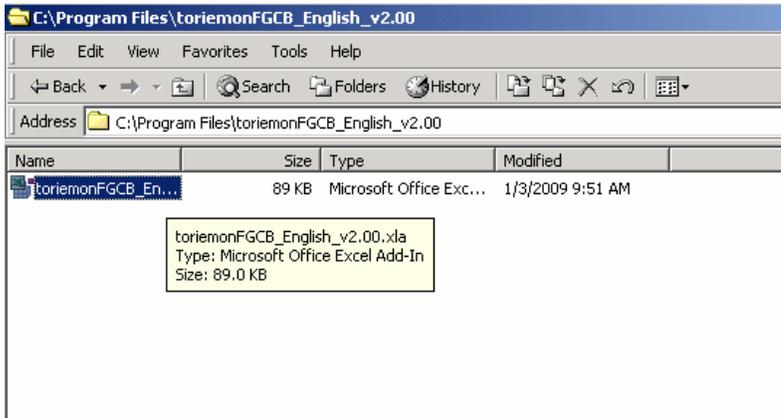
Note: If Toriemonfgcb\_English\_V2.00 is not included in the list of Add-Ins available, use the Browse button to look for the ToriemonFGCB\_English\_V2.00 folder in your program files.



ToriemonFCB\_English\_V2.00 folder under Program files.

Open this folder and select the ToriemonFGCB\_English\_V2.00.xla file; this will add the Toriemon software to the list of add-ins available under tools.

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## 2.4 Remove add-in

Start Microsoft EXCEL and start add-in manager by selecting [tool]-[add-in] from the menu bar. Deselect `Toriemonfgcb_english_V2.00` and click 'OK'. Toriemon will be deleted from the menu bar.

## 3. Settings

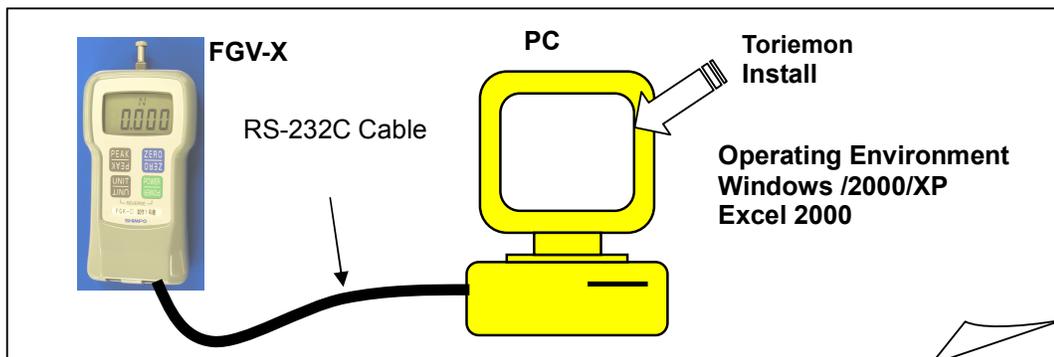
The fixed settings of 'Toriemon' are as follows:

Baud rate: 19200 bps  
Data length: 8 bits  
Parity: none  
Stop bit: 1 bit

Set the following properties to the force gauge for communication.

## 4. Connection

After the installation of 'Toriemon', connect the force gauge to your PC using the included cable on your force gauge kit (FGV-RS232 Cable). The cable must be connected to a known serial port.



## 5. Screen and Functions

### 5.1 Download

Turn the force gauge ON, start 'Toriemon' by selecting [START] from 'toriemonFGCB' on the EXCEL menu bar.

The following message appears if there's a problem with the connection or if the force gauge is turned off.

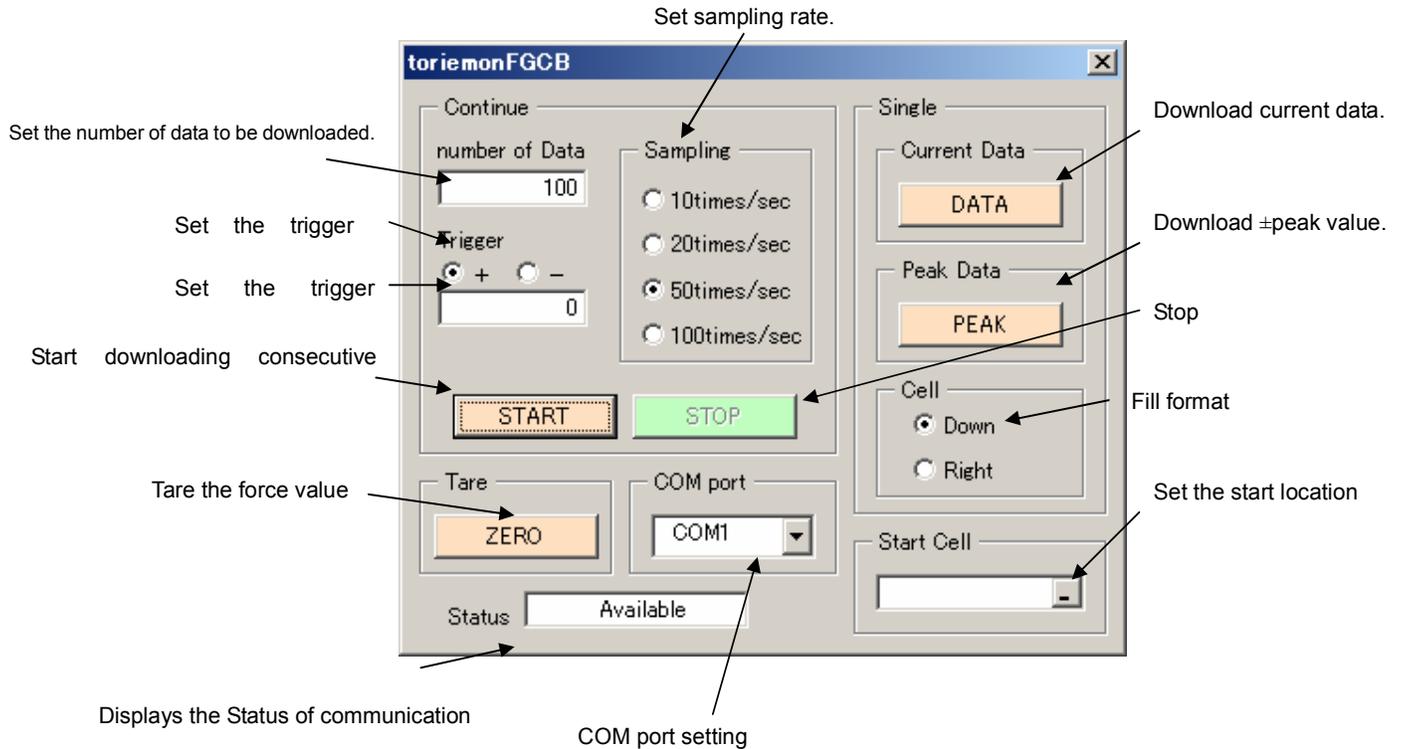


- Check the FGV-RS232 cable.
- Make sure the force gauge is set to the right settings (Consult FGV-X manual for additional; details).
- Check the application software if the right communication port is selected.
- Check if the right cable is used for communication
- Check the force gauge model, software only works for FGV-X series
- Re-start application software

Note: If all of the above conditions and steps are met and still have the problem the communication cable may need replacement.

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## 5.2 Screen



### Tare

Tare the force value.

### COM port

Set the COM port. (COM1 - COM5, pull-down menu)

### Number of data downloaded

The number of data downloading (0 to 100)

Set the number of consecutive data to be downloaded.

### Trigger (-9999 to 9999)

When trigger is set to a value other than 0, data will only be downloaded when the force gauge reading exceeds the trigger value. When it is set to 0, the trigger is not used.

You can set the sign and the value of the trigger from the application dialog box. The trigger value can be a 4-digit number without the decimal point. Availability of the decimal point is based from force gauge capacity model and unit selected.

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Example FGV-200HX requires 11.2 lbs of compression before data is downloaded. Enter 112 as the trigger value; select the trigger sign as "+"; the software will automatically set the decimal point based on the unit selected.

## **The sampling rate of the data downloaded**

Set the sampling rate of the data downloaded.  
The force gauge setting will not be affected by this setting.

## **Start**

Start downloading data. It will keep downloading until the set number of data is downloaded or if the stop button is selected. When downloading is complete, the downloaded data will be inserted (downward or across) to the selected cell on the work sheet.

## **Stop**

Stop downloading consecutive data.

## **Fill format**

Selecting the direction of values as the cells are filled. (Down or Right).

## **Downloading the current data**

The software will display current value on the force gauge. Direction of cell is based from the selected Fill format.

## **Downloading peak data**

Peak data (+peak, -peak) will be inserted to the selected cell on the work sheet. If no start cell is selected it will be inserted automatically on the right column next to the data column. When Peak Data is requested from the software the data will be transferred from the force gauge and will be deleted from the force gauge memory.

## **Select the cell**

It is possible to select the cell where data is to be transferred. Selecting this option will open a pop up window from which the start cell location can be typed in or selected. (To select the start cell use the computer mouse.)

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Pop- up window when start cell is selected

## **Format for typing the start cell**

### **Sheetnumber!\$column\$row**

Example start cell required is on the F column row 8, the following information has to be typed in

***Sheet1!\$F\$8***



To exit the start cell window press enter or select the right most icon on the bar as shown.

## **Status**

Display current status of the Toriemon.

Two possible messages:

'Waiting' (yellow) - waiting for the data to be downloaded.

'Downloading' (red) - downloading data.

When there's a problem with the connection, either 'Downloading' or 'Waiting' will stay on the screen. If this happens please close Toriemon, check the connections and restart the software application.

## **5.3 Specifications**

Windows 2000 or Higher

Microsoft Excel 2000

FGV-RS232 Communication cable

FGV-X force gauge (DART or JAVELIN Models).

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## 5.4 Alternative Communication:

The FGV-X force gauges can communicate to the PC by means of HyperTerminal communication, provided in the FGV-X manual is the set of ASCII commands.

Additional information on this feature is provided on this link:

<http://www.shimpoinst.com/resourcecenter.html>

### For support contact:

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Visit our website at [www.shimpoinst.com](http://www.shimpoinst.com) for other force and speed products.