

Thank you for purchasing the PG-FP5 flash memory programmer.

This manual helps you to grasp the overview of preparation and startup for using the PG-FP5 and support for the product, so please read this manual thoroughly before using the product.

Note the following point before reading this manual.

Access one of the following websites for “Renesas Electronics website” that appears in this manual.

Except for Europe area: https://www.renesas.com/pg_fp5

For Europe area: <http://www.renesas.eu/update> → Section PG-FP5-EE

The above pages provide the latest versions of the following software and the user's manual.

- Programming GUI (including USB driver)
- User's manual
- PG-FP5 parameter file
- Firmware file
- FPGA file

Chapter 1 OVERVIEW	2
1.1 Checking the Package Contents	2
1.2 User's Manual	2
Chapter 2 SETUP	3
2.1 Obtaining Software	3
2.2 Installation	3
2.3 System Connection	3
2.4 PG-FP5 Startup	4
2.5 Startup of Programming GUI	4
2.6 Check and Update of Version	6
2.7 Completion of Setup	7

Chapter 1 OVERVIEW

1.1 Checking the Package Contents

Check the package contents in accordance with the packing list supplied with the emulator. If there are any missing or damaged items, contact your local distributor.

1.2 User's Manual

The PG-FP5 package does not include the user's manual. Download the Renesas Electronics website. This manual is installed and registered in the Windows Start menu when the Programming GUI is installed.

Adobe Reader is required to view the PDF files. See the website of [Adobe Systems Incorporated](#) for information on Adobe Reader.

Chapter 2 SETUP

This chapter explains preparation and startup for using the PG-FP5. For detailed usage after startup, refer to the PG-FP5 user's manual.

2.1 Obtaining Software

Download the programming GUI, USB driver, and PG-FP5 parameter file (PR5 file) from the following Renesas Electronics website.

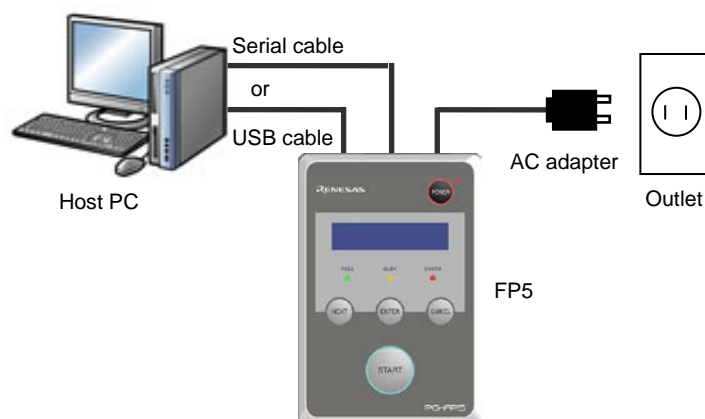
2.2 Installation

This section explains the installation procedure for the programming GUI, USB driver and parameter file (PR5 file).

Installation Order	Item	Method
1	Programming GUI, USB driver	Run the downloaded executable file (PG-FP5_Package_Vxxx.exe) and perform installation, following the directions on the installer screen. After installation, the USB driver detects the PG-FP5 by plug-and-play, and it is automatically added.
2	PR5 file	Decompress the downloaded file to any folder. A *.pr5 file is decompressed into any folder, so copy it to the FP5_PRJ folder where the programming GUI is installed.

2.3 System Connection

Connect a USB cable (or serial cable) to the USB port (or serial port) on the host PC, and the other side of the cable to the USB connector (or serial connector) on the PG-FP5. Plug in the AC adapter and then connect to the PG-FP5 power supply connector.



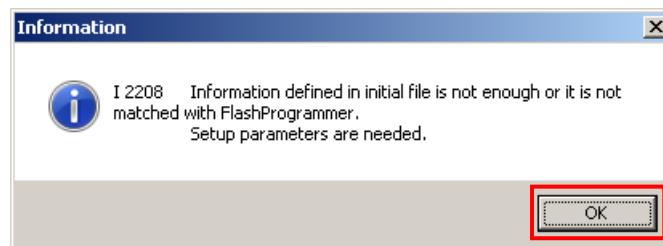
2.4 PG-FP5 Startup

After the cables are connected, press the **POWER** button on the PG-FP5. When the PG-FP5 is correctly started, the POWER LED is turned on and “Commands >” is displayed in the message display. If not, the cause may be a defect in the PG-FP5, contact your local distributor.

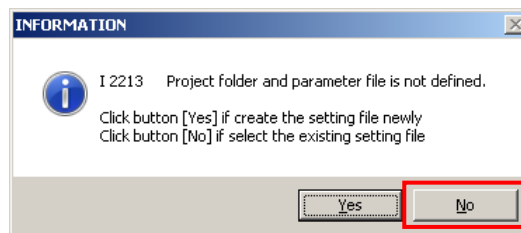
2.5 Startup of Programming GUI

Click the Start menu, “All Programs”, point to “Renesas Electronics Utilities”, “Programming Tools”, and then select “PG-FP5 Vx.xx” of “PG-FP5 Vx.xx” to start the Programming GUI. Perform the following steps.

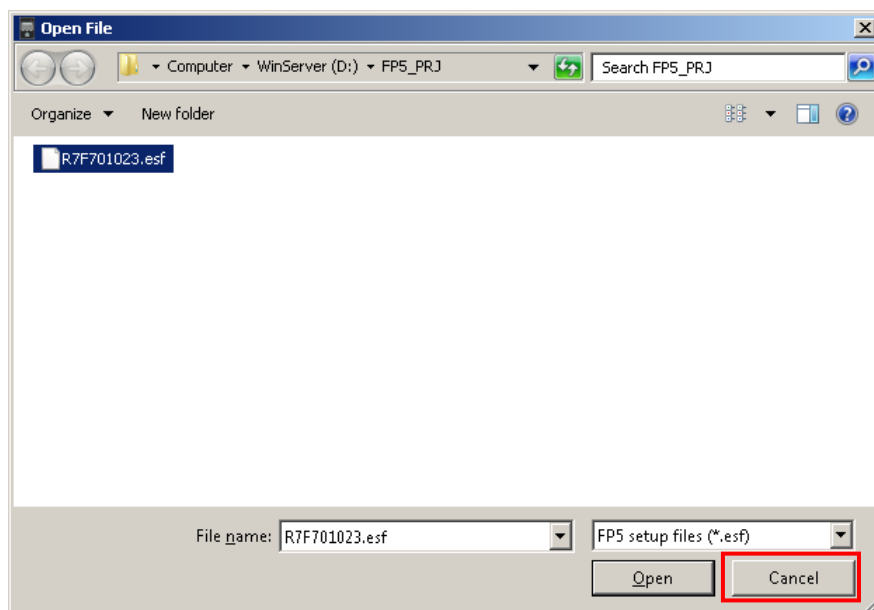
- (1) The following message will be displayed. Click the OK button.



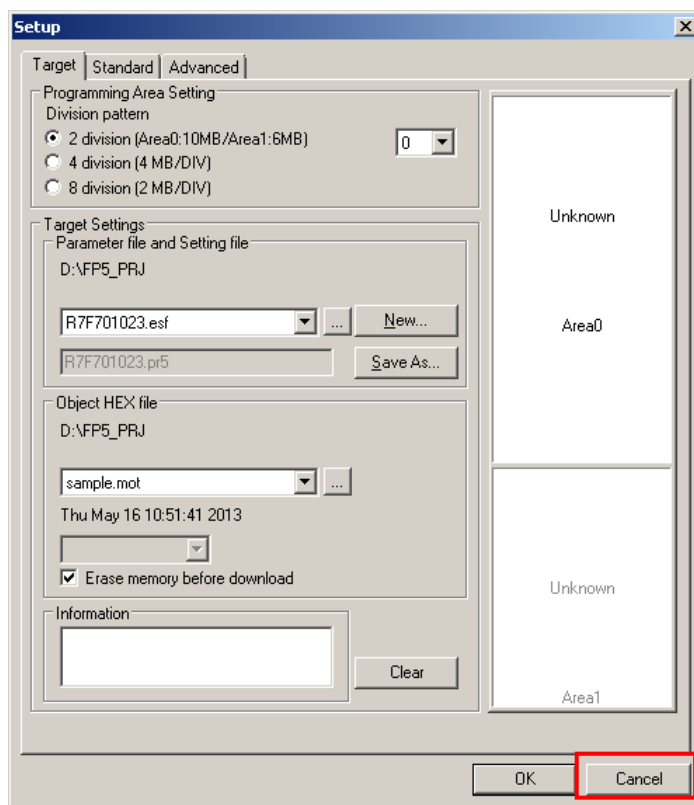
- (2) The following message will be displayed. Click the **No** button.



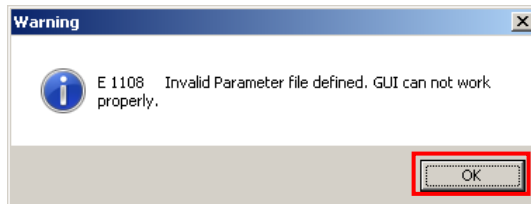
- (3) The following dialog box will be displayed. Click the Cancel button.



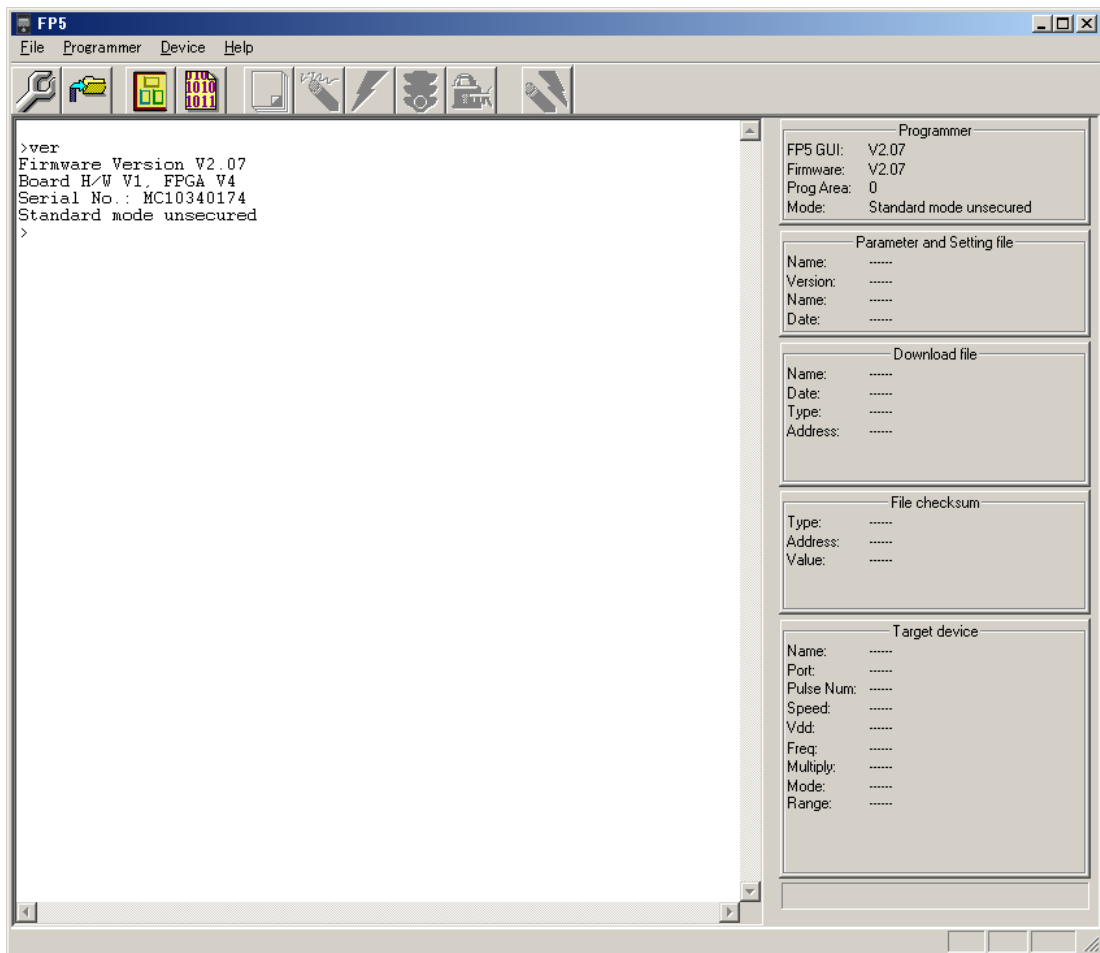
(4) The Setup dialog box will be displayed. Click the Cancel button.



(5) The following message will be displayed. Click the OK button.



(6) The main window will open.



2.6 Check and Update of Version

Use of the latest versions of the Programming GUI, firmware and FPGA is recommended. Versions can be checked as shown below. For how to update, refer to **3.4 Update of Programming GUI, firmware and FPGA** in the *PG-FP5 User's Manual*.

Programming GUI: [Help] menu → [About]

Firmware: [Programmer] menu → [Reset] command^{Note}

FPGA: [Programmer] menu → [Reset] command^{Note}

Note Display example of [Reset] command

```

>ver
Firmware Version V2.07 ← Firmware version
Board H/W V1, FPGA V4 ← FPGA version
Serial No.: MC10340174
Standard mode unsecured
    
```

2.7 Completion of Setup

This completes the PG-FP5 setup. The Programming GUI can now be used. For how to perform the setup specific to the device or to perform programming with the target system connected, refer to the PG-FP5 User's Manual and the user's manual for the target device.

Perform self-testing in case of trouble. If it does not solve the problem, please see the FAQ (<https://www.renesas.com/pg_fp5> -> Design Support -> FAQ), or contact Renesas Electronics for inquiries (<https://www.renesas.com/contact>).

All trademarks and registered trademarks are the property of their respective owners.

Notice

1. Descriptions of circuits, software and other related information in this document are provided only to illustrate the operation of semiconductor products and application examples. You are fully responsible for the incorporation of these circuits, software, and information in the design of your equipment. Renesas Electronics assumes no responsibility for any losses incurred by you or third parties arising from the use of these circuits, software, or information.
2. Renesas Electronics has used reasonable care in preparing the information included in this document, but Renesas Electronics does not warrant that such information is error free. Renesas Electronics assumes no liability whatsoever for any damages incurred by you resulting from errors in or omissions from the information included herein.
3. Renesas Electronics does not assume any liability for infringement of patents, copyrights, or other intellectual property rights of third parties by or arising from the use of Renesas Electronics products or technical information described in this document. No license, express, implied or otherwise, is granted hereby under any patents, copyrights or other intellectual property rights of Renesas Electronics or others.
4. You should not alter, modify, copy, or otherwise misappropriate any Renesas Electronics product, whether in whole or in part. Renesas Electronics assumes no responsibility for any losses incurred by you or third parties arising from such alteration, modification, copy or otherwise misappropriation of Renesas Electronics product.
5. Renesas Electronics products are classified according to the following two quality grades: "Standard" and "High Quality". The recommended applications for each Renesas Electronics product depends on the product's quality grade, as indicated below.
"Standard": Computers; office equipment; communications equipment; test and measurement equipment; audio and visual equipment; home electronic appliances; machine tools; personal electronic equipment; and industrial robots etc.
"High Quality": Transportation equipment (automobiles, trains, ships, etc.); traffic control systems; anti-disaster systems; anti-crime systems; and safety equipment etc.
Renesas Electronics products are neither intended nor authorized for use in products or systems that may pose a direct threat to human life or bodily injury (artificial life support devices or systems, surgical implantations etc.), or may cause serious property damages (nuclear reactor control systems, military equipment etc.). You must check the quality grade of each Renesas Electronics product before using it in a particular application. You may not use any Renesas Electronics product for any application for which it is not intended. Renesas Electronics shall not be in any way liable for any damages or losses incurred by you or third parties arising from the use of any Renesas Electronics product for which the product is not intended by Renesas Electronics.
6. You should use the Renesas Electronics products described in this document within the range specified by Renesas Electronics, especially with respect to the maximum rating, operating supply voltage range, movement power voltage range, heat radiation characteristics, installation and other product characteristics. Renesas Electronics shall have no liability for malfunctions or damages arising out of the use of Renesas Electronics products beyond such specified ranges.
7. Although Renesas Electronics endeavors to improve the quality and reliability of its products, semiconductor products have specific characteristics such as the occurrence of failure at a certain rate and malfunctions under certain use conditions. Further, Renesas Electronics products are not subject to radiation resistance design. Please be sure to implement safety measures to guard them against the possibility of physical injury, and injury or damage caused by fire in the event of the failure of a Renesas Electronics product, such as safety design for hardware and software including but not limited to redundancy, fire control and malfunction prevention, appropriate treatment for aging degradation or any other appropriate measures. Because the evaluation of microcomputer software alone is very difficult, please evaluate the safety of the final products or systems manufactured by you.
8. Please contact a Renesas Electronics sales office for details as to environmental matters such as the environmental compatibility of each Renesas Electronics product. Please use Renesas Electronics products in compliance with all applicable laws and regulations that regulate the inclusion or use of controlled substances, including without limitation, the EU RoHS Directive. Renesas Electronics assumes no liability for damages or losses occurring as a result of your noncompliance with applicable laws and regulations.
9. Renesas Electronics products and technology may not be used for or incorporated into any products or systems whose manufacture, use, or sale is prohibited under any applicable domestic or foreign laws or regulations. You should not use Renesas Electronics products or technology described in this document for any purpose relating to military applications or use by the military, including but not limited to the development of weapons of mass destruction. When exporting the Renesas Electronics products or technology described in this document, you should comply with the applicable export control laws and regulations and follow the procedures required by such laws and regulations.
10. It is the responsibility of the buyer or distributor of Renesas Electronics products, who distributes, disposes of, or otherwise places the product with a third party, to notify such third party in advance of the contents and conditions set forth in this document, Renesas Electronics assumes no responsibility for any losses incurred by you or third parties as a result of unauthorized use of Renesas Electronics products.
11. This document may not be reproduced or duplicated in any form, in whole or in part, without prior written consent of Renesas Electronics.
12. Please contact a Renesas Electronics sales office if you have any questions regarding the information contained in this document or Renesas Electronics products, or if you have any other inquiries.
(Note 1) "Renesas Electronics" as used in this document means Renesas Electronics Corporation and also includes its majority-owned subsidiaries.
(Note 2) "Renesas Electronics product(s)" means any product developed or manufactured by or for Renesas Electronics.



SALES OFFICES

Renesas Electronics Corporation

<http://www.renesas.com>

Refer to "<http://www.renesas.com/>" for the latest and detailed information.

Renesas Electronics America Inc.

2801 Scott Boulevard Santa Clara, CA 95050-2549, U.S.A.
Tel: +1-408-588-6000, Fax: +1-408-588-6130

Renesas Electronics Canada Limited

9251 Yonge Street, Suite 8309 Richmond Hill, Ontario Canada L4C 9T3
Tel: +1-905-237-2004

Renesas Electronics Europe Limited

Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K.
Tel: +44-1628-585-100, Fax: +44-1628-585-900

Renesas Electronics Europe GmbH

Arcadiastrasse 10, 40472 Düsseldorf, Germany
Tel: +49-211-6503-0, Fax: +49-211-6503-1327

Renesas Electronics (China) Co., Ltd.

Room 1709, Quantum Plaza, No.27 ZhiChunLu Haidian District, Beijing 100191, P.R.China
Tel: +86-10-8235-1155, Fax: +86-10-8235-7679

Renesas Electronics (Shanghai) Co., Ltd.

Unit 301, Tower A, Central Towers, 555 Langao Road, Putuo District, Shanghai, P. R. China 200333
Tel: +86-21-2226-0888, Fax: +86-21-2226-0999

Renesas Electronics Hong Kong Limited

Unit 1601-1611, 16/F., Tower 2, Grand Century Place, 193 Prince Edward Road West, Mongkok, Kowloon, Hong Kong
Tel: +852-2265-6688, Fax: +852 2886-9022

Renesas Electronics Taiwan Co., Ltd.

13F, No. 363, Fu Shing North Road, Taipei 10543, Taiwan
Tel: +886-2-8175-9600, Fax: +886 2-8175-9670

Renesas Electronics Singapore Pte. Ltd.

80 Bendemeer Road, Unit #06-02 Hylux Innovation Centre, Singapore 339949
Tel: +65-6213-0200, Fax: +65-6213-0300

Renesas Electronics Malaysia Sdn.Bhd.

Unit 1207, Block B, Menara Amcorp, Amcorp Trade Centre, No. 18, Jln Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia
Tel: +60-3-7955-9390, Fax: +60-3-7955-9510

Renesas Electronics India Pvt. Ltd.

No.777C, 100 Feet Road, HALII Stage, Indiranagar, Bangalore, India
Tel: +91-80-67208700, Fax: +91-80-67208777

Renesas Electronics Korea Co., Ltd.

12F., 234 Teheran-ro, Gangnam-Gu, Seoul, 135-080, Korea
Tel: +82-2-558-3737, Fax: +82-2-558-5141