

RC-G4

Users Manual

**The Second Version
Susei Electronics System Co., Ltd**

The First Version: Issued in March 2007

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- This product is a writing device only for one tip microcomputer with built- in flash ROM, EPROM and onetime PROM produced by Renesas Technology Corp. It can not be used for writing to other devices and for other purposes.

- Warranty period for this product is one year after from the date of the purchase. Fault(s) cause by the defect(s) in manufacturing will be repaired without charge during this period. Please notify the local distributor or us.
Please note a fault of the consumables such as a socket and a switch will be repaired at your expense. A fault of MCU device written by this product and an error caused by the fault accordingly will not be warranted.

- In case this product is used for mass production, please make sure to consider usage environment, etc. in advance by yourself and to check the reliability.

- In case this product is used in Japan, Electrical Appliance Regulations and electro magnetic interference measures will not be applied.
This product obtains neither safety standard such as UL nor standard such as IEC. Please be aware of this point when you bring it abroad.

- The content written in this manual may be revised without notice on account of performance improvement, etc. Suisai Electronics System Co.,Ltd will not be responsible for the result of operating the description.

- For enquiries on the content of this manual and the software, please contact the following. E-mail or Fax will be accepted.

1. Overview

RC-G4 is a gang writing unit only used for EFP-RC, connecting four EFP-RC main bodies. By connecting four EFP-RC main bodies to RC-G4, four EFP-RCs can conduct reading and writing simultaneously in the serial input-output mode into MCU with built-in flash memory and MCU with built-in QzROM produced by Renesas Technology Corp.

Figure 1.1 shows external figures of RC-G4.

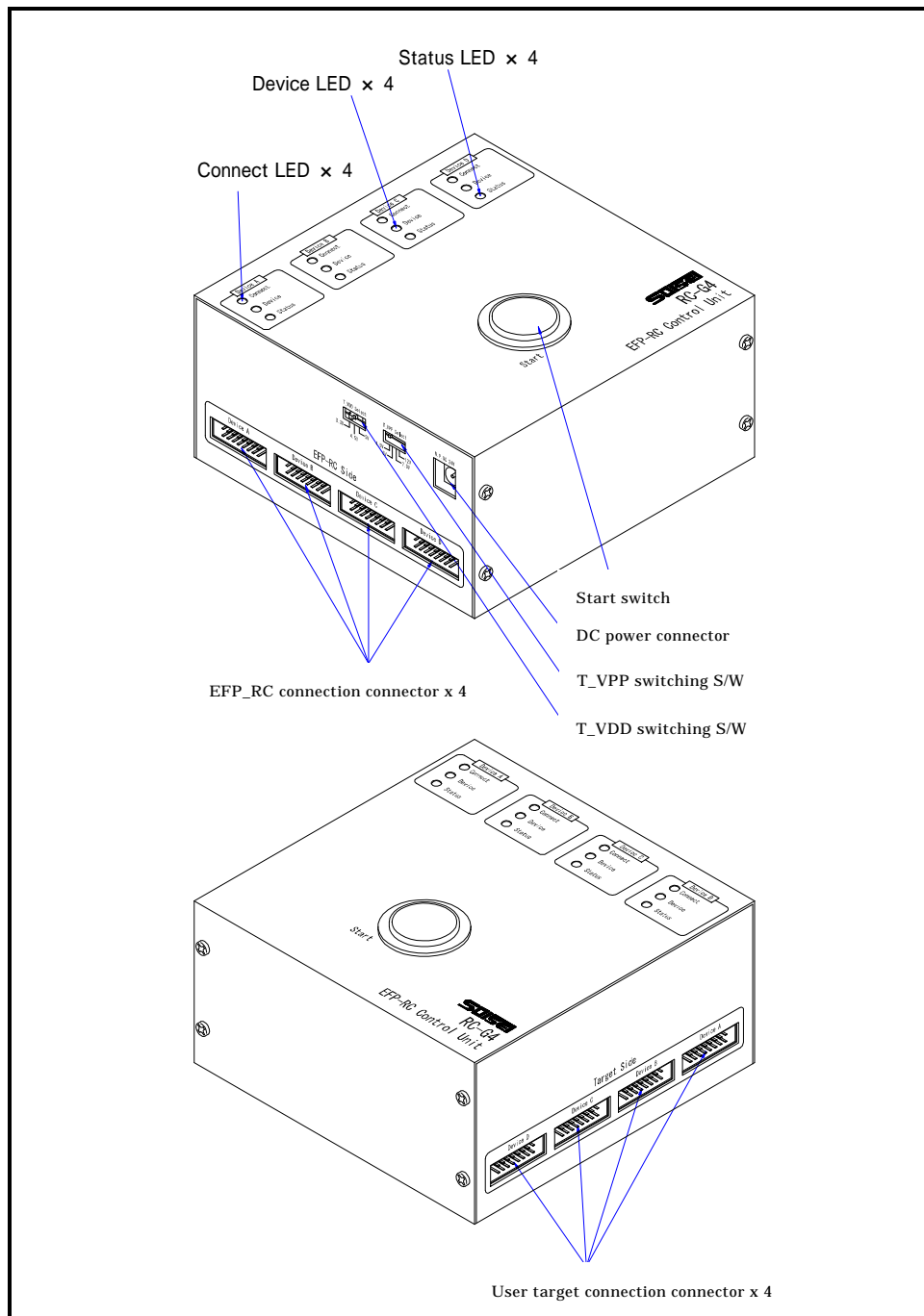


Figure 1.1 RC-G4 External Figures

[Note] Unusable EFP-RC

EFP-RC of serial number 5A00049 or before (shipped in February 2005 or before) can not be used with this product. Please prepare EFP-RC of serial number of No.5A00050 or later if this product is used.

2. Names of RC-G4 Panels and Functions

Figure 2.1 RC-G4 Panel Figure shows names of each LED, switch and connector on RC-G4 and their functions.

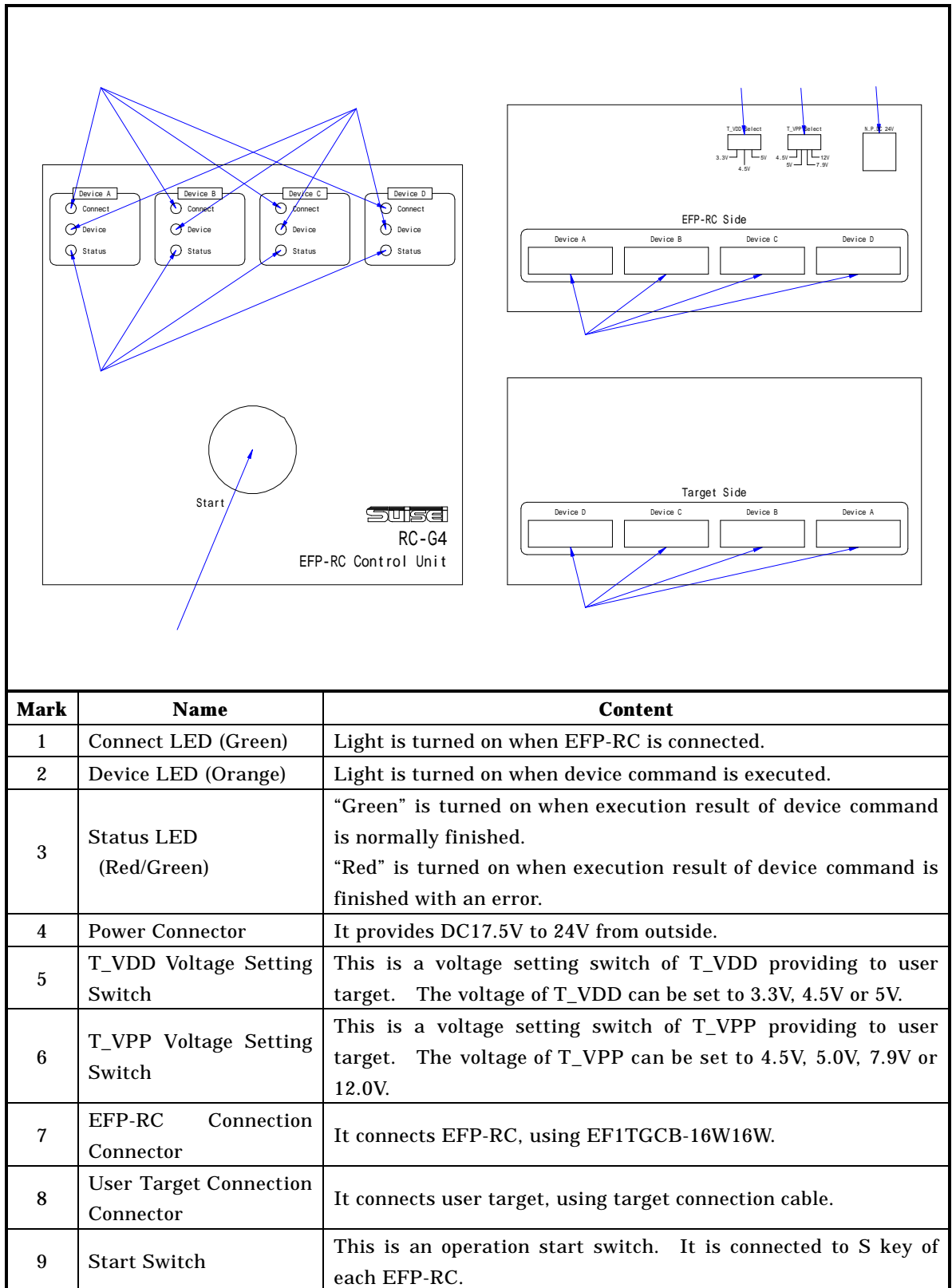


Figure 2.1 RC-G4 Panel Figure

3. How to Connect RC-G4

Figure3.1 shows how to connect RC-G4.

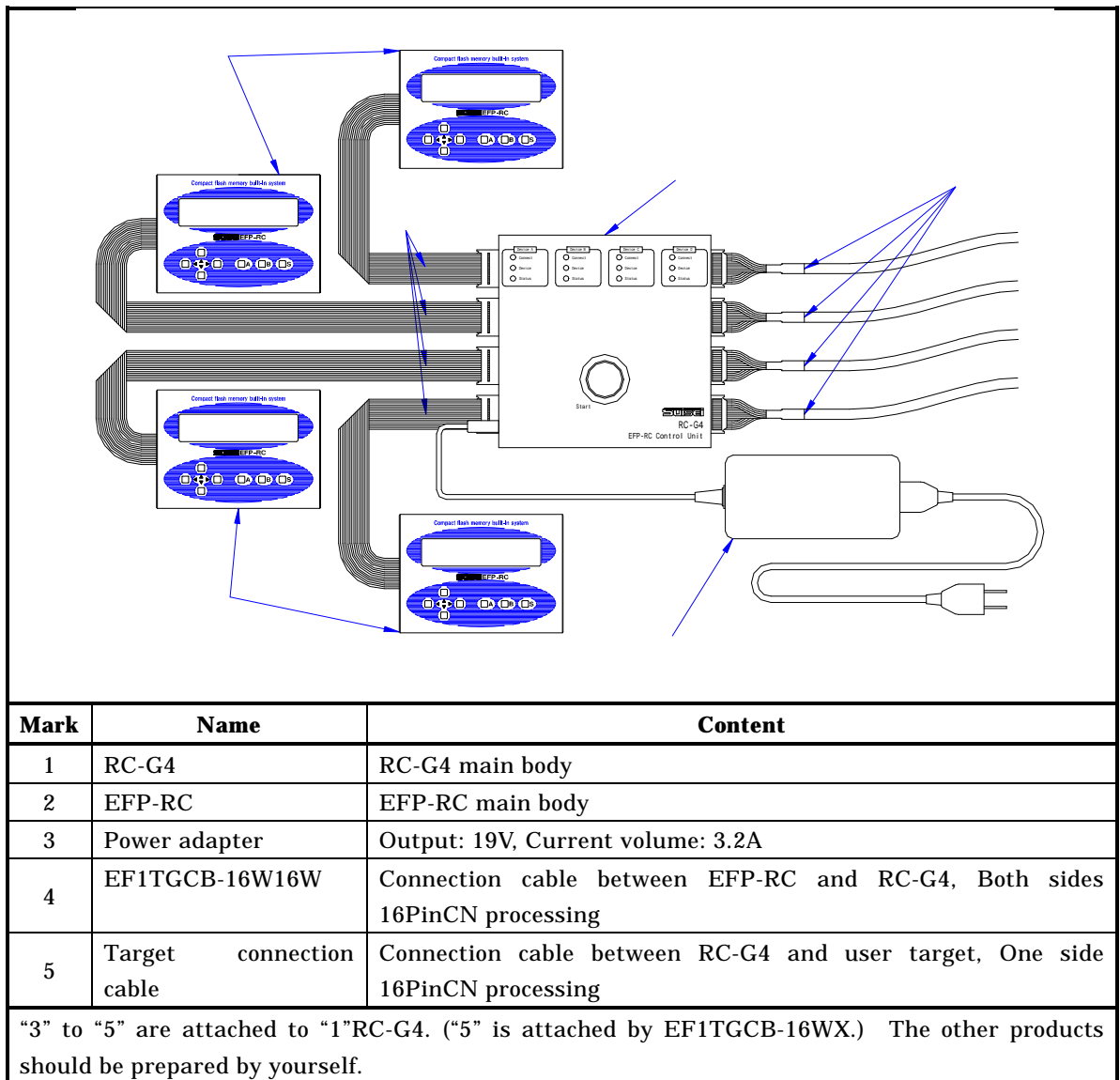


Figure3.1 RC-G4 Connection figure

3.1 Note

Note1: RC-G4 and EFP-RC should be connected with powers of RC-G4 and EFP-RC being turned off.

Note2: When the device LED(orange) of RC-G4 is turned on, please do not plug/unplug the cable, as the connection cable between EFP-RC and user target board is energized.

Note3: RC-G4 and EFP-RC should be disconnected with powers of RC-G4 and EFP-RC being turned off.

Note4: RC-G4 side supplies power to EFP-RC and user target. The supplied current to the user target is 50mA (when four EFP-RCs are used).

4. Lighting Pattern of Displayed LED

Figure 4.1 shows lighting pattern of displayed LED.

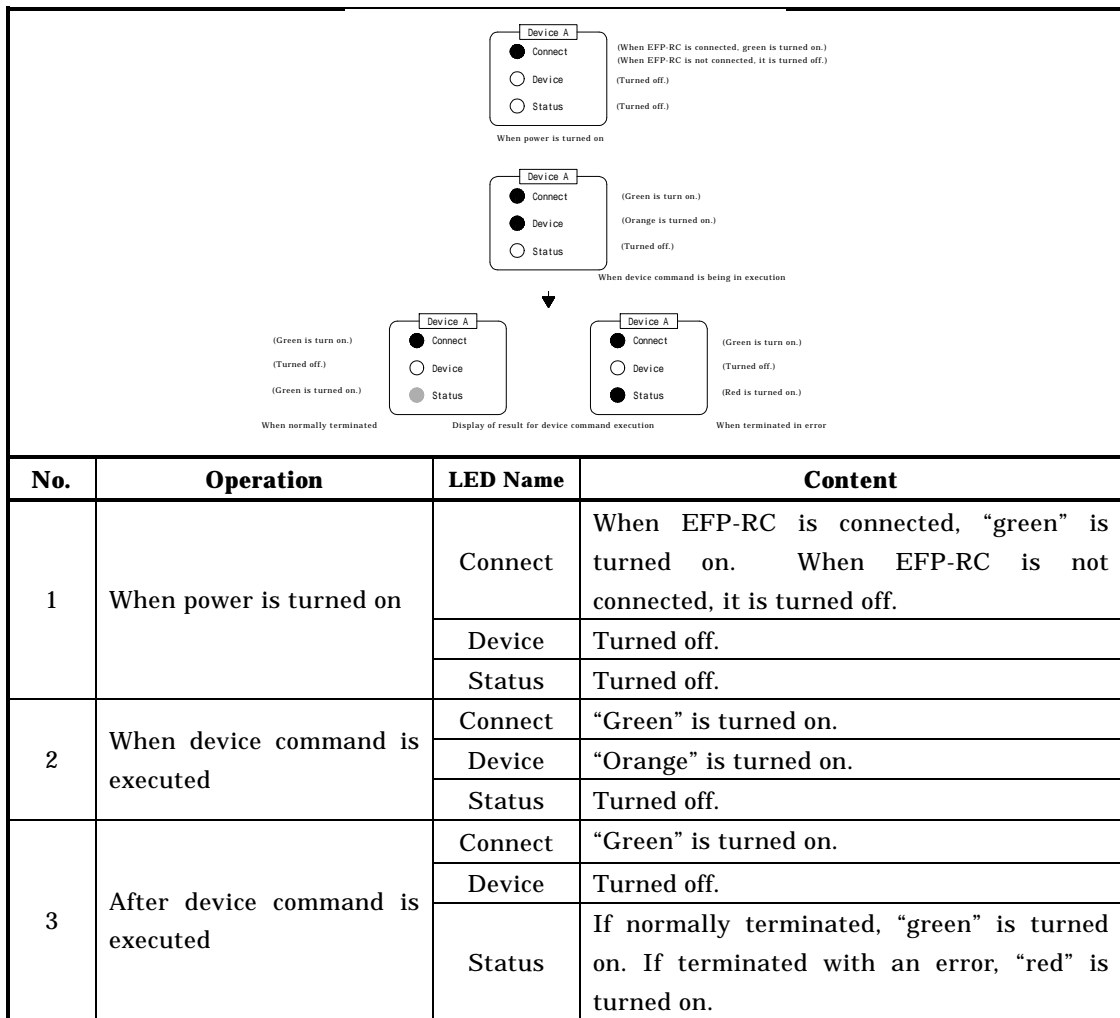


Figure 4.1 Lighting Pattern of Displayed LED

5. T_VDD and T_VPP Voltage Setting Switch

Figure 5.1 shows silk figure of T_VDD and T_VPP voltage setting switch.

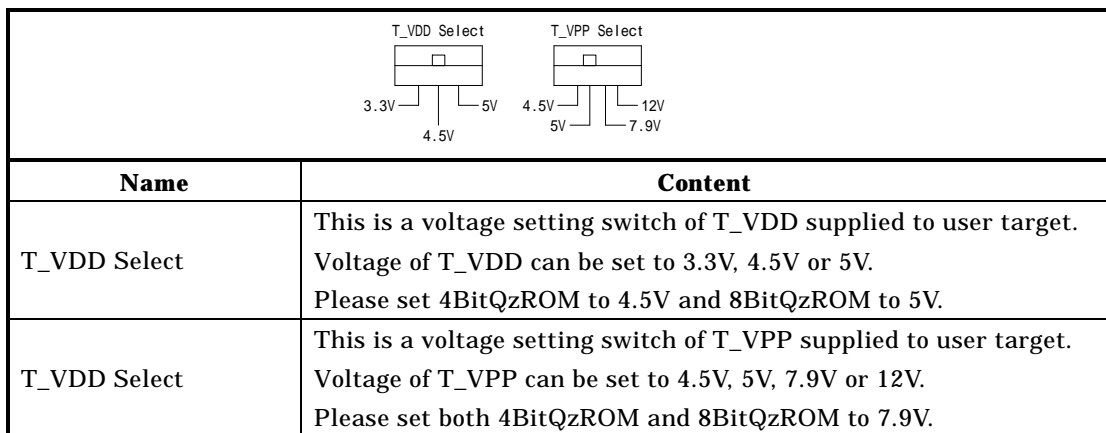


Figure 5.1 Silk Figure of T_VDD and T_VPP voltage setting switch

Note1: When device LED (orange) of RC-G4 main body is turned on, please do not switch over T_VDD and T_VPP voltage setting switch.

6. User Target Connection Connector

Figure 6.1 shows pin allocation figure of user target connection connector.

Table 6.1 shows terminal table of user target connection connector.

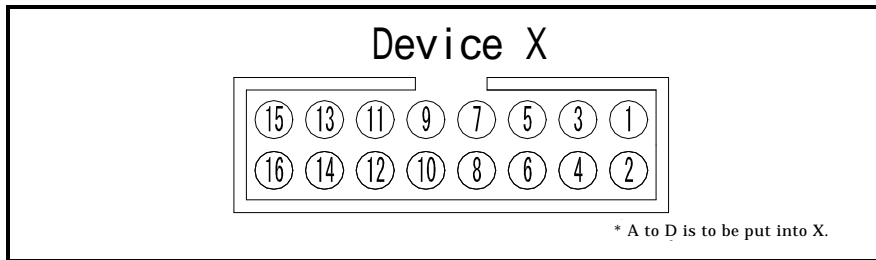


Figure 6.1 Pin Allocation Figure of Target Connection Connector

Table 6.1 Terminal Table of User Target Connector

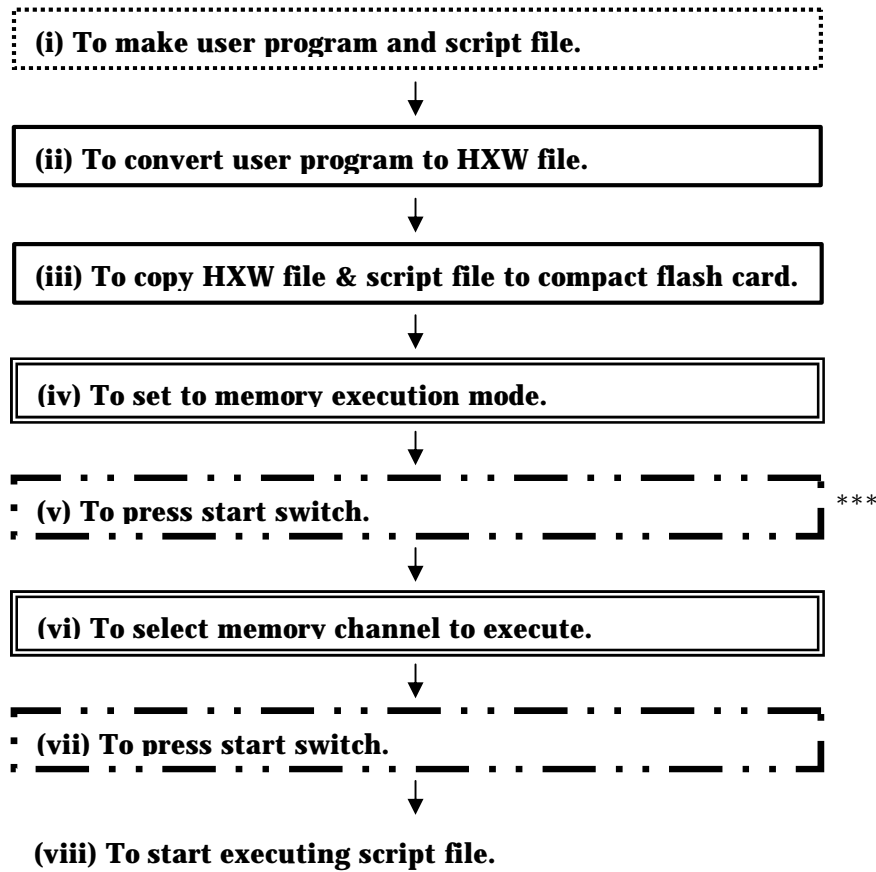
Pin NO.	Terminal Name	Input-Output	Explanation
1	GND		GND
2	(N.C)	-	
3	T_VPP	Output	Target writing power output. 4.5V, 5V, 7.9V or 12V.
4	T_VDD	Output	Target power output. 3.3V, 4.5V or 5V.
5	T_VPP 2	Output	Target writing power output2.
6	Err	Output	Error display when external execution.
7	Busy	Output	Display in external execution
8	T_PGM/OE	Output	Target writing-reading pulse.
9	T_SCLK	Output	Clock for synchronous communications
10	T_TXD	Output	Serial send data
11	T_RXD	Input	Serial receive data
12	T_Busy	Input	Target busy signal
13	Start	Input	External start switch
14	T_Reset	Output	Target reset control signal
15	(N.C)	-	
16	GND		GND

7. How to Operate RC-G4

When RC-G4 is used, each EFP-RC needs to be set to memory execution mode.

For how to set EFP-RC memory execution mode, please refer to “EFP-RC Operation Manual: “S” key operation on menu”. Please set each EFP-RC to memory execution mode in advance.

The following explains a set of operation procedure of RC-G4.



*If used continuously, (vii) and (viii) are executed again.

.....	Each file is made with C compiler and editor application.
————	To be operated with EFP-RC control software.
=====	To be operated on EFP-RC main body.
— · · ·	To be operated on RC-G4 main body.

*** Push a start switch 1 second or more. If time is short, EFP-RC will not operate.