

EFP-RC Rc-Downloader

Instruction Manual

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Suisei Electronics System Co., Ltd.

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- The contents of the EFP-RC control software instruction manual are subject to change without notification for the purpose of future performance enhancement, etc.
- For inquiries of this instruction booklet and software contents, contact us at following address by E-MAIL or FAX. For FAX inquiries, use “Technical Support Form” in EFP-RC Product CD-ROM.

Contact Address:

Suisai Electronics System Co., Ltd.

5-24 Tsurumi 6-chome, Tsurumi-ku, Osaka 538-0053

Japan

Fax: +81-6-6913-4534

E-mail: support@suisai.co.jp

Website: <http://www.suisai.co.jp/>

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1. EFP-RC Setup

This chapter contains a description of how to install EFP-RC control software and the communication settings when EFP-RC control software is initially started.

1.1 EFP-RC Operating Environment

Confirm whether contents of a personal computer of use satisfy the following conditions before installing EFP-RC control software.

[Recommended environment]

Personal computer:	The PC/AT compatible machine which Windows98SE/Me/2000/XP is installed
Hard disk space:	Space capacity more than 100M byte is necessary
Memory:	Memory more than 16M byte is necessary

1.2 EFP-RC Installation

Start Setup.EXE in an EFP-RC Product CD, and do installation work of EFP-RC control software.

When you use USB interface for communication with the main body of EFP-RC, please install USB device driver in a personal computer that you use.

Refer to Setup.TXT in the same folder about the details of Setup.EXE

2. About EFP-RC Control Soft

This chapter contains a description of the operation procedure for using EFP-RC control software. The following function can be used by using this application.

Function 1. Creation of HXW file

User program is changed into HXW file.

EFP-RC can read data from the file of a HXW file format. When you write data in MCU, please create HXW file first.

Hxw file : extract only data in HEX file, and it is a file for EFP-RC which unfolded in a binary form.

It is possible to change Intel HEX and the Motorola HEX file into a HXW file.

Function 2. The calculation of Check Sum

Calculate Check Sum of Hxw file.

Function 3. A file is downloaded to a CompactFlash card

HXW file and a script file are downloaded to a CompactFlash card with built-in EFP-RC.

Function 4. A file is uploaded from a CompactFlash card

The file is up-loaded from the CompactFlash card built into EFP-RC.

2.1 Screen composition of EFP-RC

The control software is started. The dialog of Figure 2.1 displays it.

This dialog is operated and creation of a HXW file can be performed. Moreover, the file transfer to a Compact Flash card is possible.

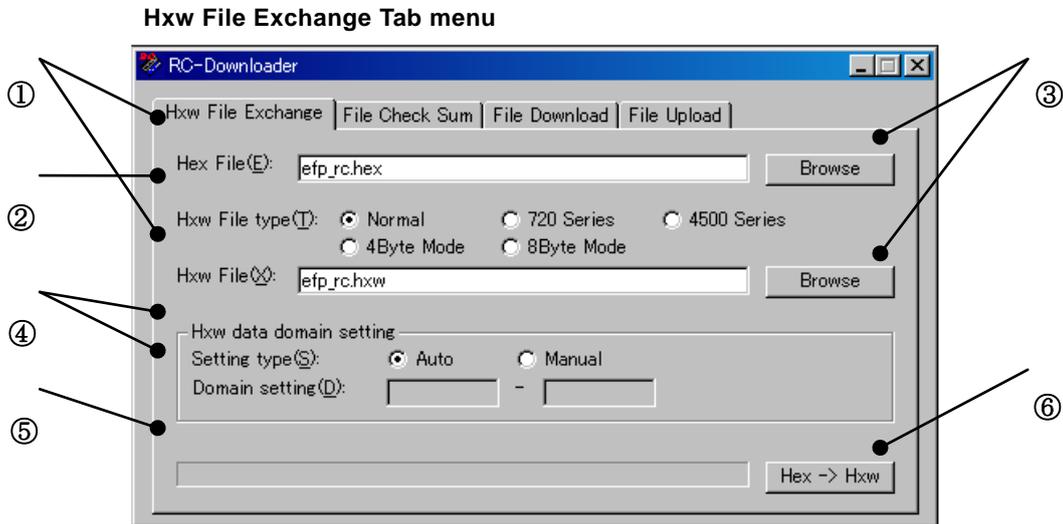


Figure 2.1 Main dialogue screen constitution (Hxw conversion)

Number	Function of a dialog
①	HXW file is inputted into a Hex File parameter. HXW file created in a Hxw File parameter is inputted.
②	The creation form of a HXW file is chosen. By MCU series to use, appoint either of following Hxw File Type. Normal : choose Normal 720 Series : 4BitMCU 720 family for 720 series Hxw file 4500 Series : 4BitMCU 720 family for 4500 series Hxw file 4Byte Mode : 8BitMCU 740 family for QzROM 4Bytemode Hxw file 8Byte Mode : 8BitMCU 740 family for QzROM 8Byte mode Hxw file
③	A file section dialog displays.
④	The creation advance situation of HXW file is displayed. appoint either of in total following Setting type in the making data region of the Hxw file. Auto : Hxw file like the data placement constitution of the Hex file is made. Manual : Parameter of Domain setting can input and appoint the domain to make Hxw file. The indication contents of (000000h-FFFFFFh) of the right side are values of the ranges that can input, and different content is displayed by setting contents of Hxw File type. Constituting it sets Domain setting parameter in C000h - FFFFh with Hex file of C080h - FFFDh data placement, and C000h - C07Fh and FFFEh, all whom there is not in Hex file the data of FFFFh are converted into Hxw file as FFh when you make Hxw file. 【Notes about Domain setting parameter input】 It is necessary for storehouse MCU in some Flash ROM to have you carry out the domain appointment of the program command in a form of xxxx00h - xxxxFFh in becoming the note method by the Page (256 byte) unit. When the start of Hex file and end address do not fall under the address of the Page unit, please revise it at the time of Hxw file making to become the address domain of the Page unit in a Domain setting parameter. [Use example] When data placement constitution of Hex file is FE008h - FFFFEh, inputs a value of FFFFFFFh, FFFFFFFh into Domain setting parameter.
⑤	Progress bar of the Hxw file making is displayed.
⑥	HXW file is created.

File Check Sum Tab Menu

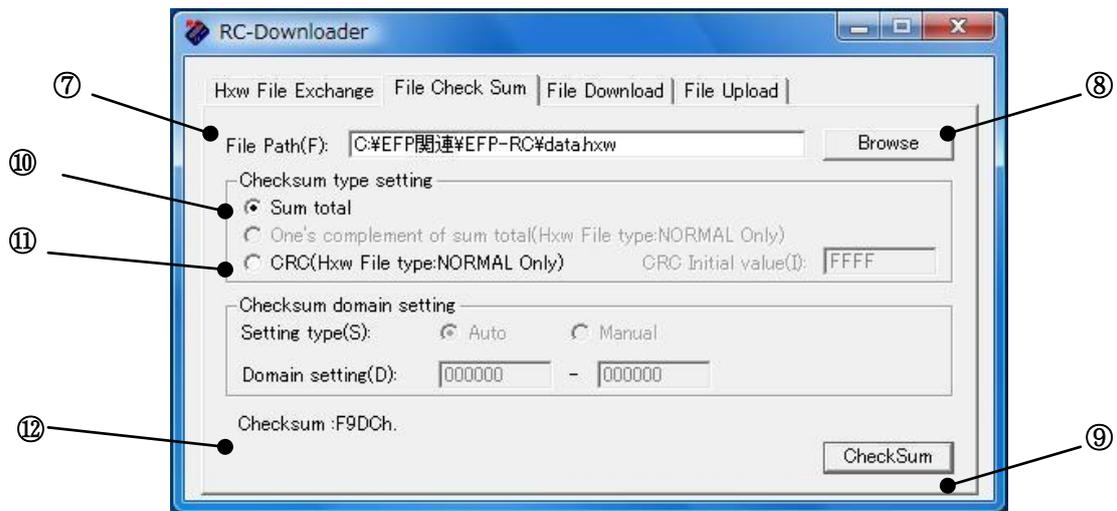


Fig.2.2 Main dialogue screen constitution (Check sum calculation)

Number	Function of a dialog
⑦	Appoint Hxw file calculating the check sum
⑧	Display a file section dialogue for cf. file.
⑨	Check sum calculation
⑩	Display lower 16bit value of the grand total of user's program data in the Hxw file
⑪	Calculate CRC Sam value of user's program data in Hxw file.
⑫	Display the grand total of user's program data or CRC Sam value.

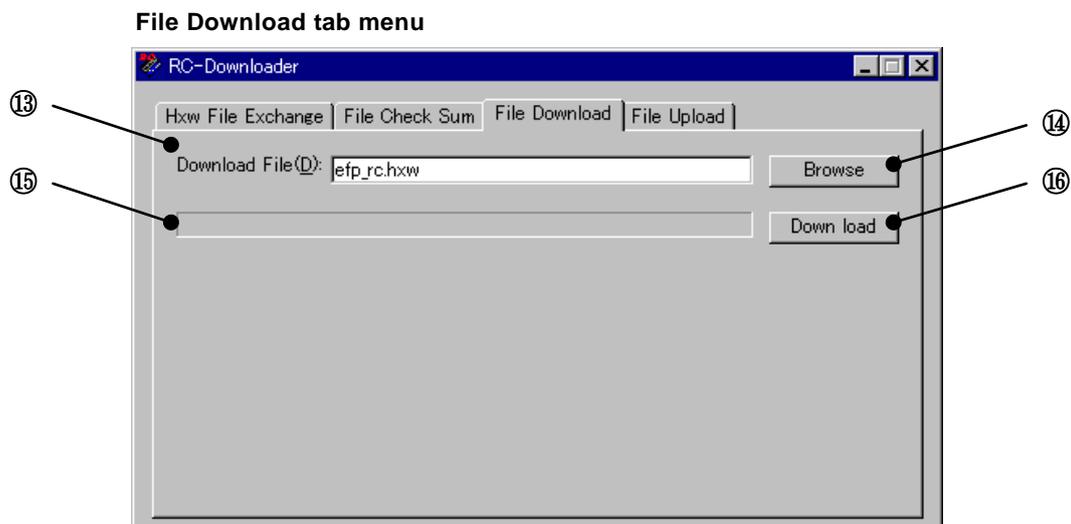


Fig.2.3 Main dialogue screen constitution (A file download)

Number	Function of a dialog
⑬	Appoint a file to download to a CF card.
⑭	Display a file section dialogue for cf. file.
⑮	The progress bar of the file download displays it
⑯	Download a file to a CF card.

File Upload Tab menu

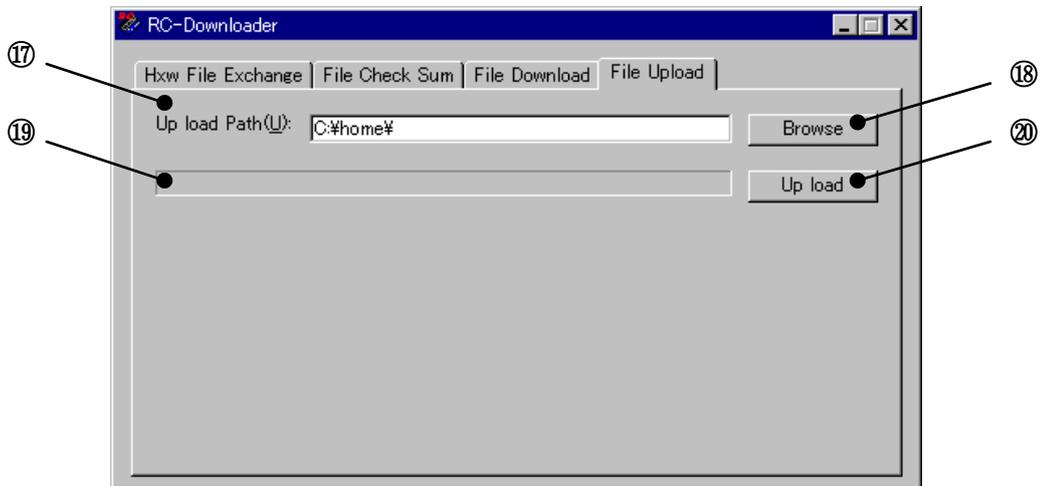
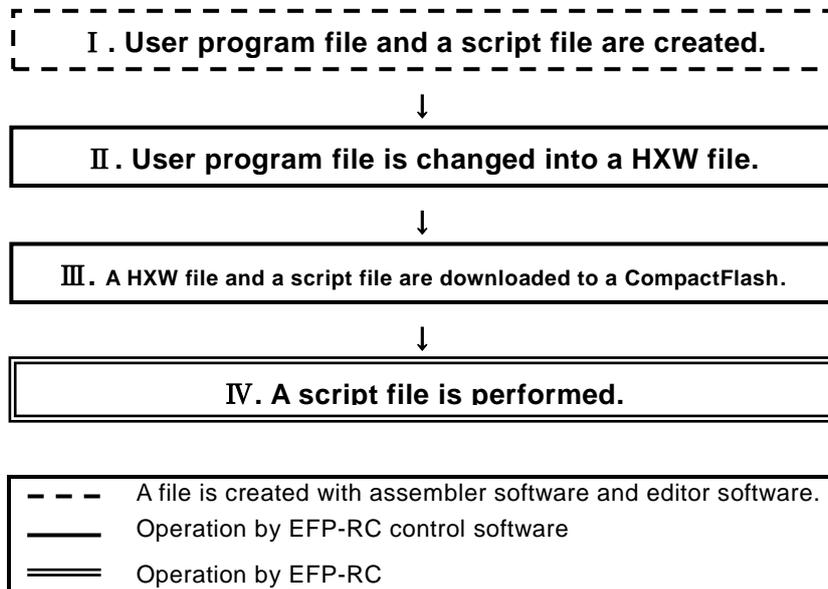


Fig.2.4 Main dialogue screen constitution (File upload)

Number	Function of a dialog
⑰	appointed the destination of the file to upload by Compact Flash
⑱	The indication of the file section dialogue of the file destination use is possible
⑲	progress bar of the file upload displays it
⑳	It is uploaded a file by Compact Flash

3. Operation explanation EFP-RC

The operation method from creation of a Hxw file to download of a file is explained.



I . User program file and a script file are created.

A user program is created by the Intel HEX file or the Motorola HEX file.

The script file which operates EFP-RC is created with editor software etc.

II. User Program is changed into a HXW file.

“Hex -> Hxw” button is clicked after setting up each parameter.

The creation screen of Hxw file is shown in Figure 2.5.

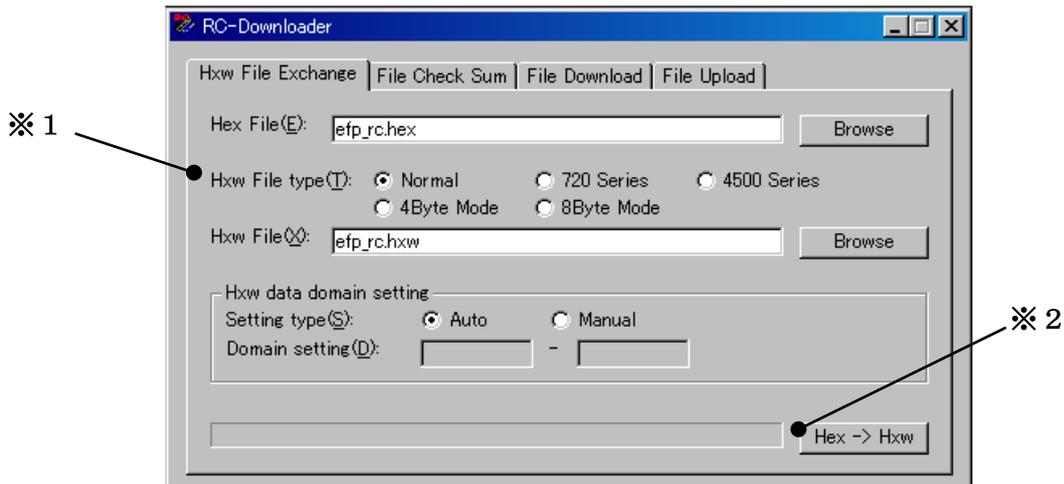


Figure 2.5 The creation screen of Hxw file

*1 Please set it to show it in table 3.1 by the MCU series.

Table3.1 H x w F i l e T y p e

Hxw File type	MCU series
Normal	Please usually appoint Normal.
720 Series	4BitMCU 720 family for 720 series Hxw file
4500 Series	4BitMCU 720 family for 4500 series Hxw file
4Byte Mode	8BitMCU 740 family QzROM for 4Byte mode Hxw file
8Byte Mode	8BitMCU 740 family QzROM for 8Byte mode Hxw file

*2 When a progress bar reaches the right-side end, the making of the Hxw file is completed.

III. A HXW file and a script file are downloaded to a CompactFlash.

When you perform this processing, please connect EFP-RC with a personal computer by the USB cable. "Down load" button is clicked after setting up each parameter.

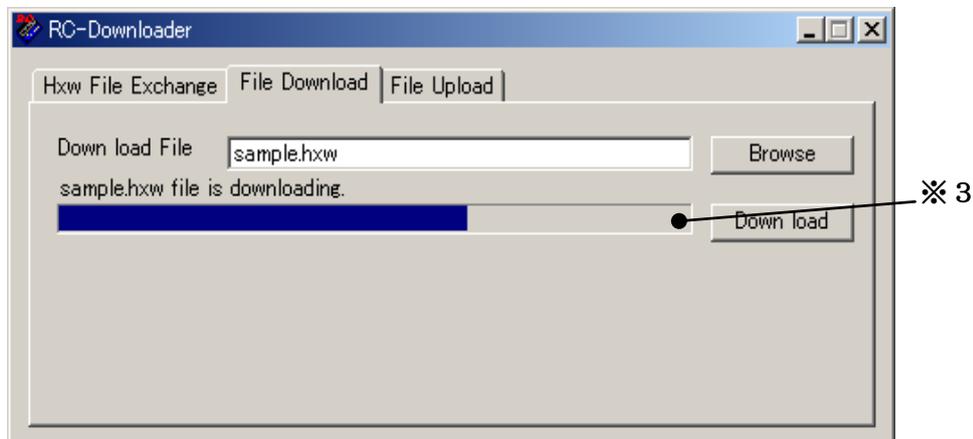


Figure 2.6 File download screen

※ 3 When three progress bars reach the right-side end, the download of the file is completed

IV. A script file is performed.

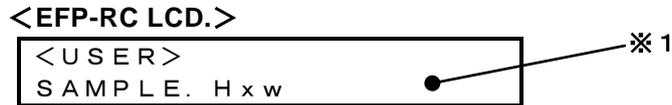
EFP-RC is operated and a script file is performed.

4. Upload of a file from Compact Flash card

The operation method which uploads a file from a Compact Flash card to a personal computer is explained.

I .The file to upload is chosen.

EFP-RC is operated. Cursor is united with the file to upload.



※ 1 : Cursor is united with a SAMPLE.Hxw file.

II .A file is uploaded in a personal computer from a CompactFlash card.

When you perform this processing, please connect EFP-RC with a personal computer by the USB cable. "Up load" button is clicked after setting up each parameter.

It shows a file copy screen in fig.2.7.

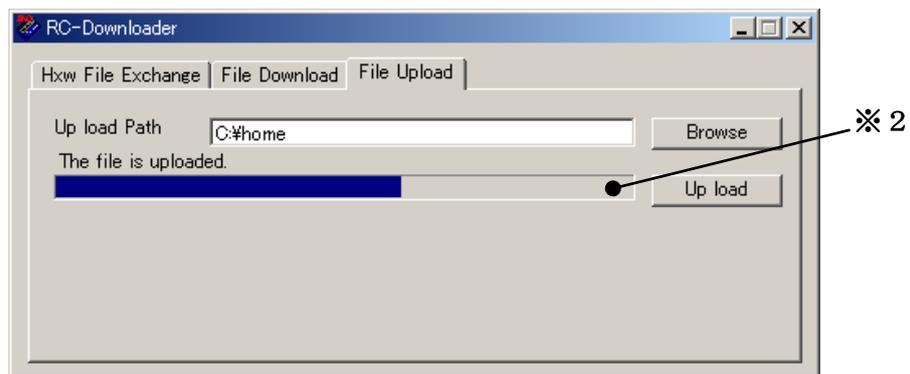


Figure 2.7 File upload screen

※ 2 When a progress bar reaches the right-side end, the upload of the file is completed.