EFP-RC Firmware Upgrade Procedure Manual

1. Check of Serial Number

A firmware upgrade file differs depending on last four digits of the serial
number on the backside of EFP-RC main unit. Please check the serial number
before the upgrade.

Last Four Digits	F/W	Product CD F/W Storage Location
0001 0049		Upgrade is not necessary for those.
0050 0085	Ver.3	...\firmware\version_3\Efprc3xxxx.fxw
0086 or more	Ver.4	...\firmware\version_4\Efprc4xxxx.fxw

In case the serial number can not be checked, please check it with the firmware
version by starting EFP-RC.

[How to Check Firmware Version]
After turning on EFP-RC, please press a left cursor key.
LCD shows as follows:

<EFP-RC LCD Screen>
```
+------------------+
| EFP-RC Ver.x.xx.xx |   <-- x.xx.xx indicates the version number.
| yyyyyyyy BYTE FREE|
+------------------+
```

<Content of Version>
Not Displayed   : Ver.3.00.02 or lower: Upgrade is not necessary.
Ver.3.xx.xx   : It can be upgraded with Ver.3 firmware.
Ver.4.xx.xx   : It can be upgraded with Ver.4 firmware.

!!! Note !!!
If you upgrade the firmware with wrong data, EFP-RC will not be operated
normally and repair support will be needed.

2. Upgrade of Firmware

Procedure 1) Setup
After connecting EFP-RC with a computer using a USB cable, please start EFP-RC
control software RC-EXE.

Procedure 2) Setting of File Folder
After EFP-RC main unit is started, please scroll the menu screen and point the
cursor to 5:FIRM.UPDATE, and thereby move to FIRMWARE folder.

<EFP-RC LCD Screen>
```
+------------------+
|1:FILES           |
|2:PROGRAM         |
+------------------+
           Click the down-arrow button four times.
+------------------+
|4:FILES           |
|5:FIRM.UPDATE     |   <-- Point the cursor to this position.
+------------------+
           Click the right-arrow button once.
+------------------+
| - FILE NOT FOUND - |
|                  |
+------------------+
```

Procedure 3) Download of Upgrade Data
Please download targeted firmware (Efprcxxxxx.fxw) checked in " 1. Check of Serial
Number" to FIRMWARE folder.
Please drag and drop Efprcxxxxx.fxw file to EFP-RC control software dialogue or
click the Download button after setting Efprcxxxxx.fxw to Download File parameter
in File Download tab.

Thereafter the liquid crystal screen in EFP-RC shows as follows:

```
<EFP-RC LCD Screen>
  +-------------------+
  |[              ]|  <-- Screen while downloading Efprcxxxxx.fxw
  |DOWNLOADING NOW    |
  +-------------------+

  +-------------------+
  |Efprcxxxxx.fxw     |  <-- It is OK if the file name is displayed.
  |                   |
  +-------------------+
```

Procedure 4) Upgrade of FIRM
 Please rewrite the firmware program to Efprcxxxxx.fxw by operating EFP-RC.
 Please conduct the following operation on EFP-RC.

```
<EFP-RC LCD Screen>
  +-------------------+
  |Efprcxxxxx.fxw     |  <-- Point the cursor to this position.
  |                   |
  +-------------------+
            Click S button once.
  +-------------------+
  | EFP-RC Ver.x.xx.xx |  <-- x.xx.xx indicates the version number of Efprcxxxxx.fxw
  |A=YES  B=NO  S=SUM |      Return to the previous screen after 5 seconds
  +-------------------+
            Click A button once.
  +-------------------+
  |[              ]|  <-- Rewrite of the firmware data is conducted.
  |FIRMWARE UPDATING! |  <-- The process will end in in about 10 seconds.
  +-------------------+
```

 After the firmware data is rewritten, EFP-RC's main unit is restarted.
 Please conduct MCU setting of the main unit again when restarted.

 !!! Note !!!
  Please do not turn off the power while the firmware is being rewritten.
  In case the power is turned off while the firmware is rewritten, it will not
  be started and repair support will be needed.

3. Check of Firmware Version
  Please check it on LCD display by pressing a left cursor key.

```
<EFP-RC LCD Screen>
  +-------------------+
  |EFP-RC Ver.x.xx.xx |  <-- Check if the new version is displayed.
  | yyyyyyyy BYTE FREE|
  +-------------------+
```