FireWire CardBus PC Card
for Macintosh PowerBookG3

CBFW2

User Guide

Rev. 3.0

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RATOC Systems, Inc.

CBFW2 User Guide

1. Introduction

This User Guide describes how to install,use,and troubleshoot the RATOC CBFW2
FireWire CardBus PC Card.(called CBFW2 in this User Guide)
The information in the README.TXT file on the CD-ROM may include the latest information.
Be sure to read the README.TXT file as well.

1-1.Before Using the CBFW2

● Never attempt to disassemble the PC Card and the dongle.

● Do not bend, drop or strike the PC Card and the cable, or subject it to heavy pressure.

● Information in this document is subject to change without notice.

● If you have any questions or find errors in this guide, do not hesitate to let us know.

1-2.Package

● CBFW2 FireWire CardBus PC Card

● 4PDV(i-Link) to 6P FireWire cable (6feet)

● Dongle with two FireWire 6P port and Cable Power input jack

● Support software CD-ROM(The version below are subject to change without notice)

   REX-CBFW Installer

   REX-CBFW Driver 1.7

   REX-CBFW Enabler 1.0

   FireWire Support 2.2.2

   FireWire Enabler 2.2.2

   QuickTime 4.0

   EditDV unplugged 1.6.1   45 days trial version

● User Guide document(This document)

NOTE:

   If any of these items are missing from the CBFW2 Retail package,
   contact your supplier immediately.

2. Setup

2-1.Setup procedures

1. Install the driver for the CBFW2 (Refer to **2-2**)

2. Verify the installation.(Refer to **2-3**)

3. Check whether there are two drivers below in the **Extension** folder from **Control Panel**.
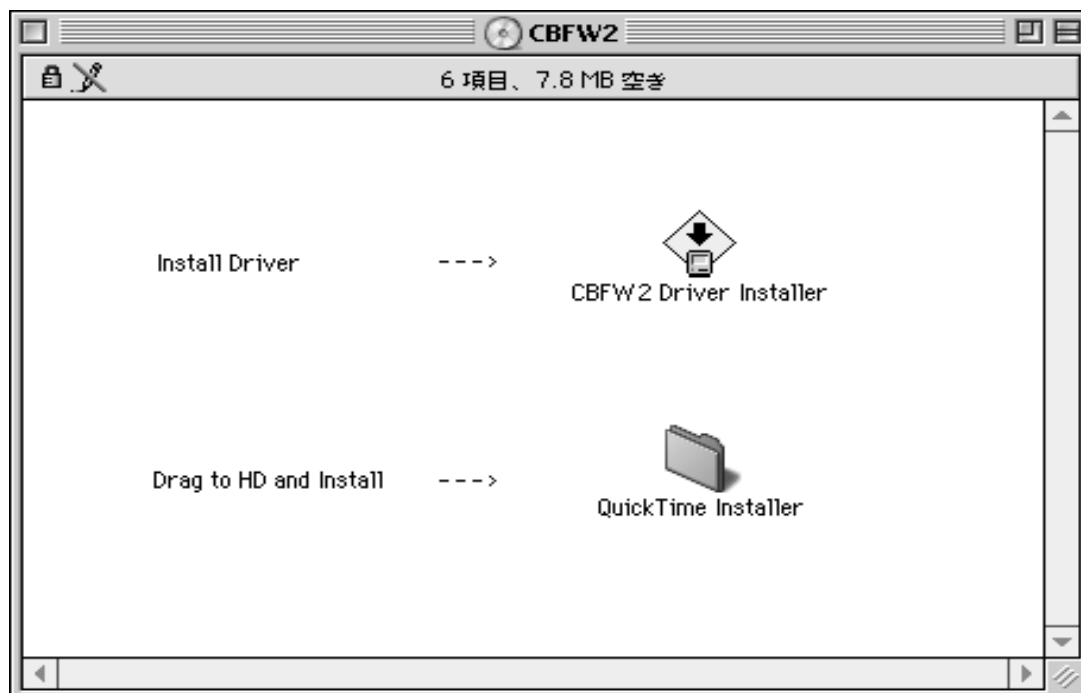
 -**QuickTime FireWire DV Enabler**
 -**QuickTime FireWire DV Support**

4. If you could not find **QuickTime FireWire DV Enabler,QuickTime FireWire DV Support** you have to install **QuickTime4.0.**(Refer to **2-4**)

5. Insert the CBFW2. (Refer to **2-5**)

6. Connecting the DVCAMs (Refer to **2-6**)

2-2.Install the driver for the CBFW2.

5

1. Insert the Support software CD-ROM into CD-ROM drive of your PowerBookG3.

2. After you see the icon of the CD-ROM mounted on the desktop,

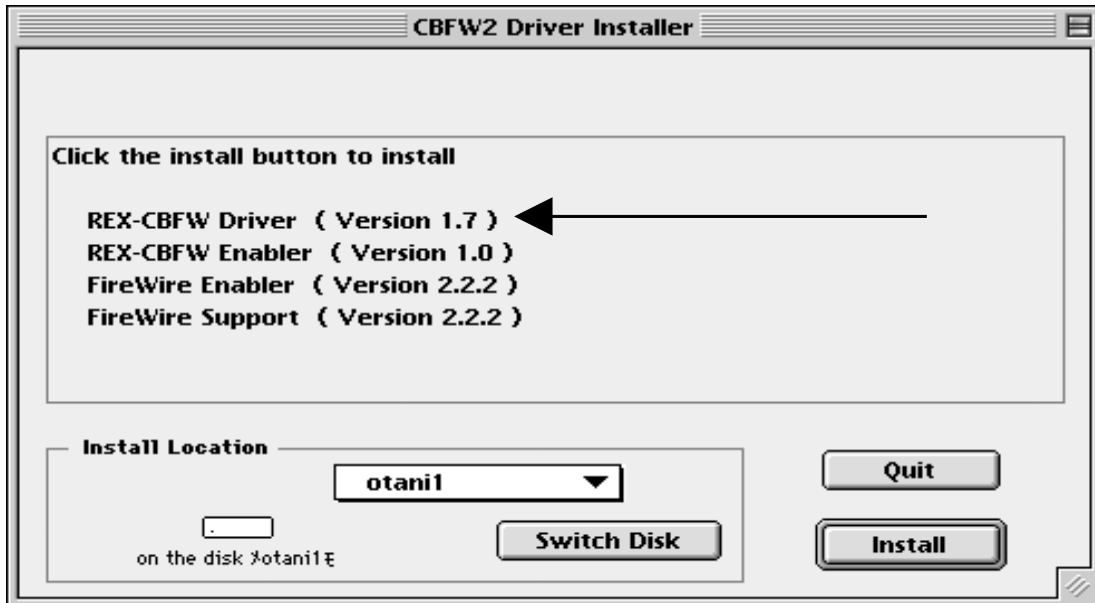open the CD-ROM icon.You will see a screen below.Click "**CBFW2 Driver Installer**"
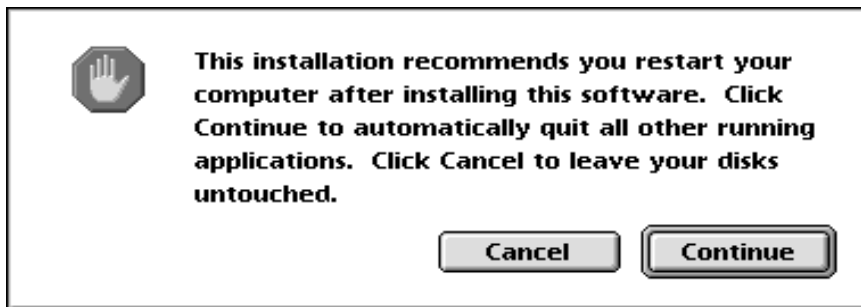
3. You will see the screen below.Click **Install** button.

    (Note)Actual Version of REX-CBFW Driver is 1.6,

        though the screen below says REX-CBFW Driver (Version 1.7).

4. You will see the screen below.Click **Continue** button.

5. You will see the screen below. Click **Restart** button.

2-3. Verify the installation.

1)Make sure you succeed to install **the driver for the CBFW2,**

 following the steps below.

Open **Extension** folder in the **Control Panel**.

If you can find **the files below** in the **Extensions** folder,

you succeed to install **the driver for the CBFW2.**

 -REX-CBFW Driver (Version 1.6)
 -REX-CBFW Enabler(Version 1.0)
 -FireWire Enable 2.2.2
 -FireWire Support 2.2.2

NOTE: The version number is subject to change without notice for software updates.

2)Check whether there are two drivers below in the **Extension Manager**

 from **Control Panel**.

 -**QuickTime FireWire DV Enabler**
 -**QuickTime FireWire DV Support**

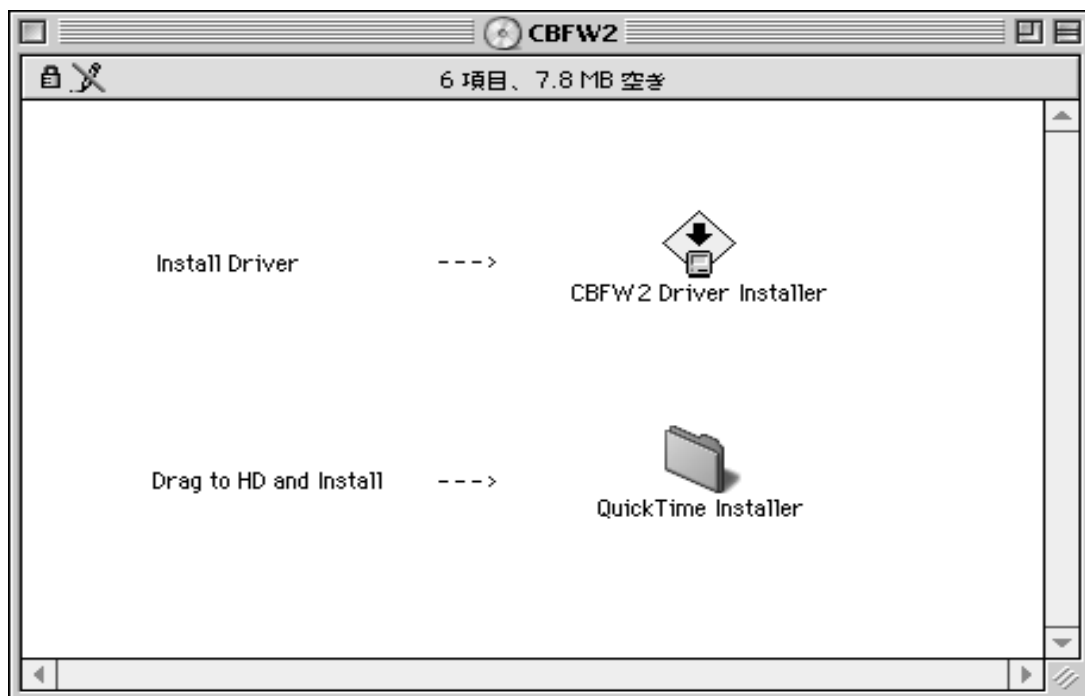 If you could not find the two drivers above,go to the next step **2-4.Install QuickTime4.0.**

 If you could find the two drivers above,ignore step **2-4.Install QuickTime4.0**

 and go to the step **2-5.Insert the CBFW2.**

2-4. Install QuickTime 4.0.

If there aren't **QucikTime FireWire DV Enabler** and **QucikTime FireWire DV Support** in the **Extension** folder in the **Control Panel**,you have to install **QucikTime 4.0**.

Follow the steps below.

1. Insert the CD-ROM into CD-ROM drive of your PowerBookG3.

2. After you see the icon of the CD-ROM mounted on the desktop,
Open the CD-ROM icon.You will see a screen below.

3. Double-click the **QuickTime Installer** folder.You will see a screen below. Double-click the **QuickTime Installer** icon.

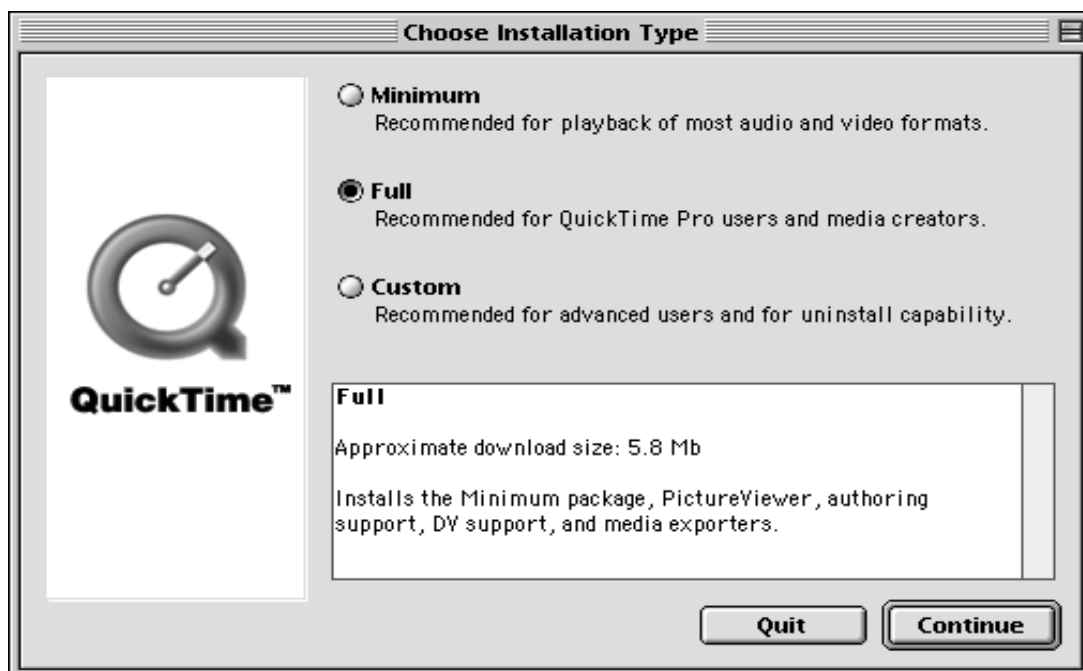**4.** You will see a screen below.Click **Continue** button.

5. You will see the screen below.Click **Agree** button.

6. You will see the screen below.Select **Full** and click **Continue** button.

7. You will see the screen below. Click **Continue** button.

8. You will see the screen below. Click **Quit** button.

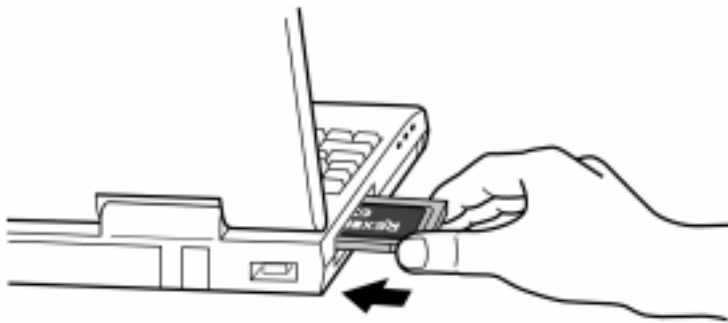**9.** To verify the installation, open the **Extention** folder in the **Control Panel** and find the five
drivers below. If you can find the five drivers, you can go to the step **2-5. Insert the CBFW2**.

> **-REX-CBFW Driver (Version 1.6)**
> **-REX-CBFW Enabler(Version 1.0)**
> **-FireWire Enable 2.2.2**
> **-FireWire Support 2.2.2**
>
> -**QuickTime FireWire DV Enabler**
> -**QuickTime FireWire DV Support**

2-5.Insert the CBFW2

1.Turn off your PowerBookG3.

2.Grasp the CBFW2 by the edges with the label facing upward.
Insert the CBFW2 into the slot and push it in until it is firmly seated.

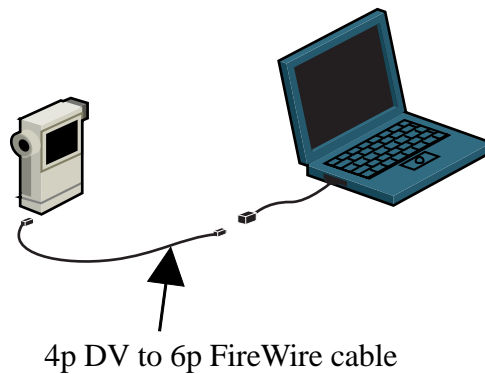**3**.Make sure the CBFW2 icon is mounted on the desktop.

2-6. Connecting the DVCAMs

1)Connect the DVCAM to the CBFW2 with the FireWire cable.

   You can connect the DVCAM without turning off the DVCAM or the PowerBookG3.

   You can hot plug the DVCAM.

  Refer to the manual that accompanied your DVCAM for the location of the FireWire connector.

4p DV to 6p FireWire cable

2)Check if the DVCAM is recognized.

    Follow the steps below.

   1.Set the DVCAM in Camera Mode and turn on the DVCAM.

   2.Start **Apple Video Player** in your system.

   3.If you can preview with **Apple Video Player,** the DVCAM is recognized.

     But note the **Apple Video Player** can not capture sound and

     recording function does not work.

   Now you can do a video editing.

 To install EditDV trial version,open EditDV folder and follow the installer and

 readme instructions.

3-1. How to Register

We highly recommend to register yourself as our customer through our on-line registration.

1. On the Internet, access our site (**http://www.ratocsystems.com/english/**)

2. Follow window menu guide to register.

3. Fill out and submit the registration form.

3-2. Software Update and Support

-**Software Update**-

The latest driver is subject to change for improvement or bug fix.

You can download the latest version from our web site.

(**http://www.ratocsystems.com/english/**)

-**Technical Support**-

You can get a Tech support from RATOC at the following

(Open Monday - Friday,10:00A.M. to 5:00P.M(PST))

 RATOC Systems International,Inc. Tech support

  Address: 1933 O'Toole Avenue Suite A109

          SanJose, CA 95131, U.S.A.

  Phone : (408)955-9400

  Fax   : (408)955-9402

  E-mail : int-support@rexpccard.co.jp

  Web   : http://www.ratocsystems.com/english/

NOTE:

    Please include the following information to help us to assist you in the event of a problem:

      Our product name, serial number, and product description

      Host Computer Name, MacOS version

      Application software/driver version

3-3. System Requirements

- PowerBookG3/233,G3/250,G3/266,G3/292,G3/300(1998 WallStreet),
  G3/333,G3/400(1999 Lomberd)

- MacOS8.6 or MacOS9

- QuickTime4.0

  1.)QuickTime FireWire DV support

  2.)QuickTime FireWire DV Enabler

  If you can not find these software component above,CBFW2 does not work.

- CD-ROM drive

- DV capturing frame rate depends on CPU speed,Memory size,software and

  Hard Disk sustained data write rate.You need more than 7MB/sec. sustained data write

  rate Hard Disk.

- To capture full frame rate and non dropped frame movie file to FireWire HD directly,

  G3/400 or G3/333(Lomberd) is required.

  If you have WallStreet model PowerBook,you may not capture non-dropped frame movie

  file to FireWire HD directly.For WallStreet model,we strongly recommend to use internal

  HD or external Ultra SCSI as a scratch drive, and then save the movie to FireWire HD.

4. Specifications

Bus interface

CardBus (PC Card Standard)

Data transfer rate

100, 200 and 400 Mbps

Power requirements

Voltage +3.3V (Supplied from PC Card slot)
237mA (Suspend)
325mA (MAX)

Operating environment

Temperature from 32F to 131F(0 to 55 °C)
Relative humidity 95% maximum (Non-condensing)

Dongle

Two FireWire 6p port
DC Cable Power input jack (DC8 to 30V, 3A max.)

GND ─⊙─ +DC （5.5φ − 2.1φ)

(Note)
FireWire cable power is available through these ports.Output voltage and current depend on the Power Adapter
which is connected to the Cable Power input jack. We recommend Power Adapter which has Class_1
(15W,12V 1.3A) x 1 capability.This adapter is sold separately as optional component from us. Product name
is CBCPA1(110V-90V input) or CBCPA2(250V-90V input).

Features

● Designed for CardBus PC Card slot

● 32-bit Data Bus and 33MHz operation

● Supports Bus-mastering data transfer

● IEEE 1394-1995,IEEE1394.a compliant

● OHCI based architecture link layer chip included

● Data transfer rates up to 400 Mbps

● Provides Two FireWire 6p port(2× 6p)

● 1394 Cable power is available through add-on DC Power adapter

FCC Statement

Trademarks

- Apple,PowerBook,QuickTime,FireWire,FireWire Logo,MacOS and Macintosh are registered trademarks of Apple Computer Corp.
- EditDV unplugged is a trademark of Digital Origin Co.
- Other tradenames and products names appearing in this guide are the property of their respective owners.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

(1) Reorient or relocate the receiving antenna.

(2) Increase the separation between the equipment and receiver.

(3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

(4) Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance may result in this unit not complying with FCC Rules Part 15.