P C M C I A   E x t e r n a l   F l o p p y   D i s k   D r i v e   U n i t

FlashBuster

Installation Guide

for

Windows NT 3.51 / 4.0

Y-E DATA

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Revision History

Rev.	Date	Description
A	02 October 1996	First edition, for Windows NT 3.51.
B	30 September 1998	Modified for NT 4.0 and FlashBuster III

1.   Introduction

This guide explains how to install and use FlashBuster with Windows NT 3.51 / 4.0.   It contains the following sections:

1.   Introduction
2.   Before you begin...
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The FlashBuster driver for Windows NT supports both 2HD and 2DD media in 1.44 MB and 720 KB formats.   On a Japanese Windows NT system, the driver also supports "3-mode" 1.23 MB and 1.2 MB formats.

2.   Before you begin...

● System Requirements

Your computer should:
   have a PCMCIA Type II or Type III PC card slot;
   have one unused interrupt request line (IRQ) available;
   have at least 1 MB of free space on your hard disk;
   be running Windows NT 3.51 or later.

Your computer must have a PC card slot to use FlashBuster.   Your PC card slot must support Type II 5-volt I/O cards.   A Type III slot works well, too.

FlashBuster is an interrupt-driven device.   Your computer must have one free interrupt request (IRQ) line, which can be dedicated to FlashBuster.   Please note which IRQ is available, before installing the FlashBuster driver.

To install the FlashBuster driver for Windows NT, you will need about 1 MB of free space on your hard disk to run the setup program.   If you copy the setup program files to your hard disk, you will need an extra 700 KB or so free space.

Your computer must be running Windows NT 3.51 Workstation or Advanced Server, or later.   PCMCIA support for Windows NT was first introduced with version 3.51.   You must be running a Japanese version of Windows NT to take full advantage of 3-mode media support.   Your computer should be supported by Windows NT and listed on the hardware compatibility list.

You will also need a method to access the FlashBuster for Windows NT install diskette from your computer, using a floppy disk drive or via a network connection, for example.

● Access Rights

   You should log into the Administrator account, or to an account with administrator privileges, in order to install the FlashBuster driver.   No special privileges are needed to use FlashBuster, once the driver has been installed.

● "Hot-Insertion" not supported

   Windows NT does not support "hot-insertion", that is, inserting or removing PC cards from the PC card slot while Windows NT is running.

   To use a PC card with Windows NT, you must shutdown and reboot Windows NT after inserting the PC card into your computer's PC card slot.

● Use only one FlashBuster

   You cannot use more than one FlashBuster with Windows NT at the same time, even though your computer may have more than one PC card slot.   This is a limitation of Windows NT PCMCIA support.

   You can use other PC cards, such as modem or network PC cards, along with FlashBuster at the same time.   We recommend you put the other PC card in slot 1, and FlashBuster in slot 2.

● Removing a floppy diskette

   As with any floppy disk drive (FDD), always ensure the diskette is not being accessed (the LED on the front panel of the FDD is not lit), before removing the floppy diskette from the FlashBuster FDD.

3.   Installation

Follow the instructions below to install the FlashBuster for Windows NT driver on your computer.

   i)   Please confirm your computer meets the system requirements outlined in section 2

   ii)   Start Windows NT.

   iii)   Log in as Administrator or into an account with administrator privileges.

   iv)   Place the FlashBuster for Windows NT setup diskette in your floppy disk drive.

      If your computer doesn't have an FDD, you may use a network connection to another computer, which does have an FDD.   You may also copy the files on the FlashBuster setup diskette to a empty folder (directory) on your computer's hard disk, instead.

   v)   Open the File Manager.

   vi)   Click the device and directory which contains the FlashBuster for Windows NT setup files.

   vii)   Double-click SETUP.EXE to start the setup wizard.   Setup will display the following window, and prepare to install the FlashBuster driver.
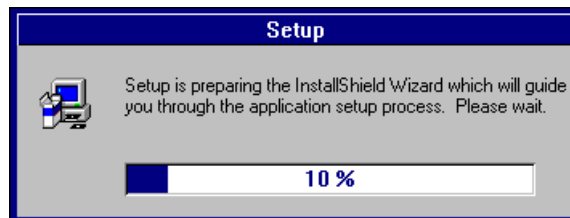
viii) When preparations are finished, the setup wizard displays the following welcome window.   Click [Next] to continue, [Cancel] to exit setup.
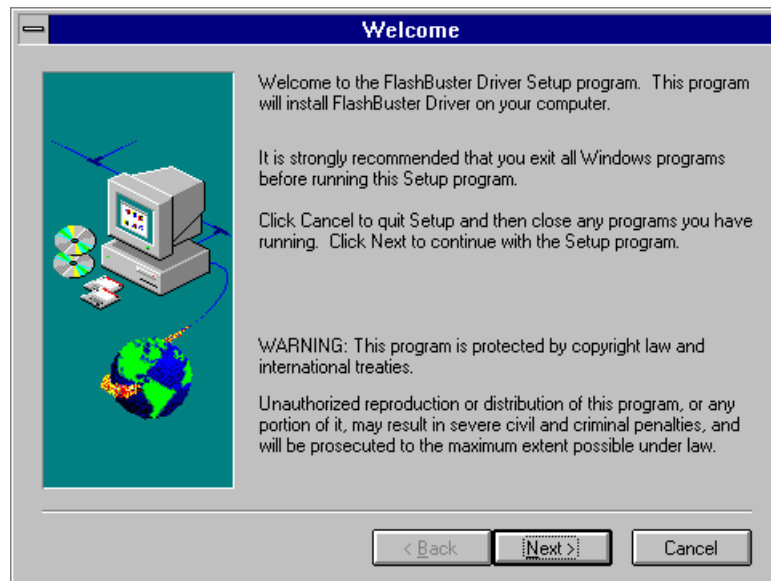
ix) If you click [Cancel] or press the Escape key, the following window appears.   Click [Exit Setup] to exit the setup program, without installing FlashBuster.   To return to the previous screen and continue FlashBuster installation, click [Resume].
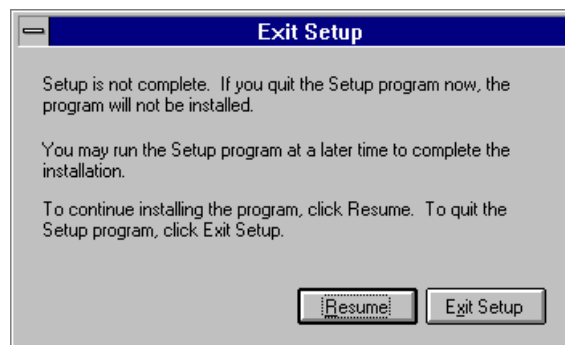
x) Setup then displays a list of interrupt request lines (IRQ).   Click the round button next to a free IRQ, the one which can be dedicated exclusively for FlashBuster's use. Click [Next] to continue, [Back] to go back to the previous screen, or [Cancel] to exit setup.
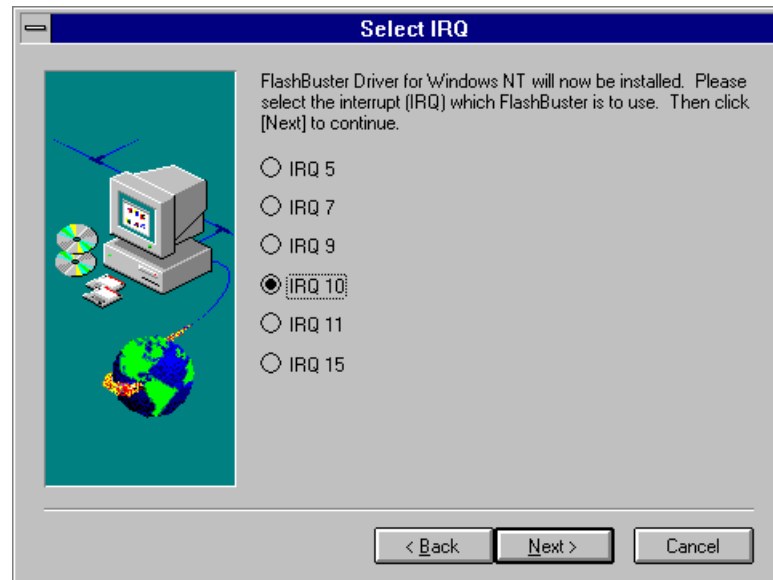
Note: just because an IRQ is listed above, doesn't mean it is unused.   The IRQ may already be dedicated to some other device.   For example, IRQ 5 is often allocated to network cards, and IRQ 7 to a parallel port for printers.   Please confer with your system administrator or your computer manual for details.

xi) If you are updating the FlashBuster from a previous version, this window will appear. Click [Yes] to upgrade the driver; click [No] to exit setup.

xii) The setup wizard now installs the FlashBuster driver for Windows NT, and enables the driver in the system registry.

> **Setup**
>
> Copying FlashBuster Driver 1.00.15 ...
>
> 100 %
>
> [Cancel]
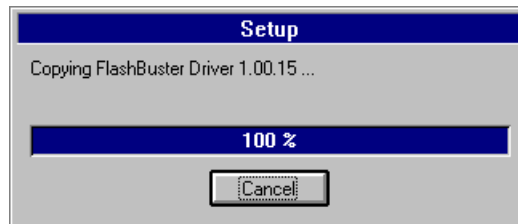
xiii) When the installation completes successfully, the setup wizard displays this message.   Click [OK] to exit.

> **Information**
>
> ℹ   Setup is complete. To use FlashBuster, follow these steps:
>
> 1. Connect the drive unit to the PC card.
> 2. Insert the PC card into your PC card slot.
> 3. Restart your system.
>
> [OK]

xiv) To use FlashBuster, connect the FlashBuster FDD to the PC card with the cable, and insert the FlashBuster PC card into the PC card slot of your computer. Shutdown and restart the Windows NT operating system.   See section 4

4. Usage

Please follow this procedure to use FlashBuster with the Windows NT operating system.

i)   If your FlashBuster is not able to separate the PC card and FDD, please make the mode switch in the back of the FDD to FDD-mode. If your FlashBuster is able to separate, please connect the FlashBuster drive unit (FDD) to the PC card with the connecting cable.

Note: You must attach the cable and FDD drive unit to the FlashBuster PC card (or set to FDD-mode), before inserting the card into the PC card slot. Otherwise, FlashBuster will not recognize the FDD and not work as a floppy disk drive.

ii) Insert the FlashBuster PC card into the PC card slot of your computer.

iii) If Windows NT is already running, shut it down.

iv) Start (boot) the Windows NT operating system.

Note: Windows NT does not support "hot-insertion", so you must restart Windows NT after inserting a PC card into your computer's PC card slot.

v)   Open File Manager.   You should see a new drive letter and floppy icon, denoting the FlashBuster drive (drive A:, below).   You can now use FlashBuster as any usual floppy disk drive

Note: As with any floppy disk drive (FDD), always ensure the diskette is not being accessed (the LED on the front panel of the FDD is not lit), before removing the floppy diskette from the FlashBuster FDD.   Otherwise data loss may result.
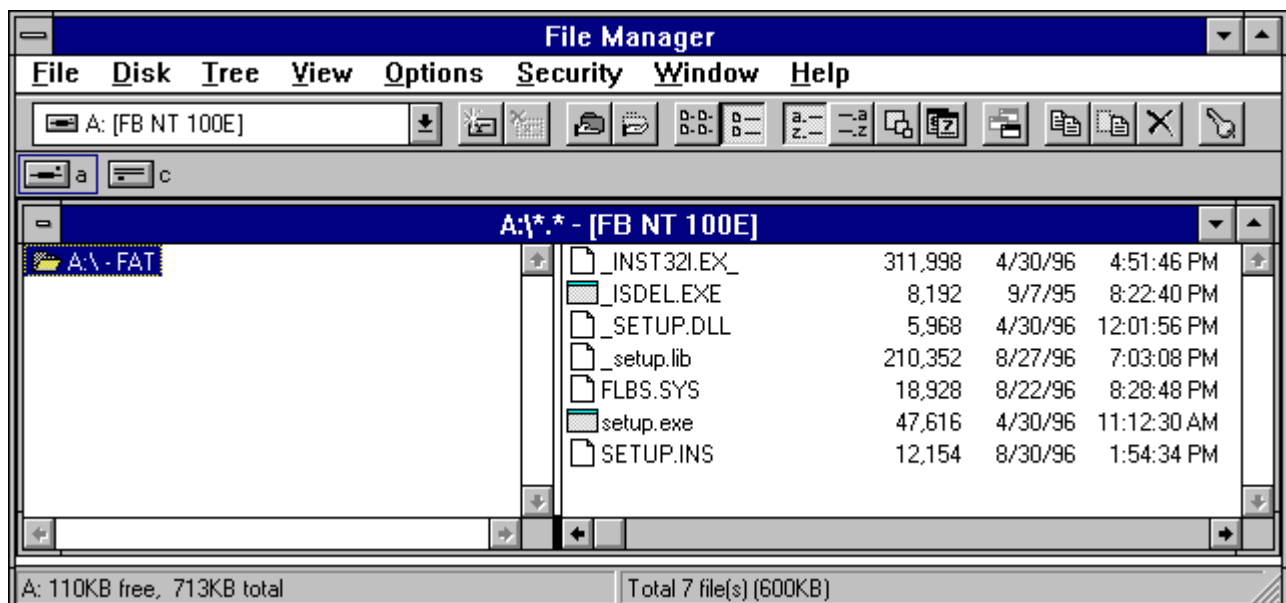
5.   Error Messages

5.1   Setup Program

(1)   Flbs.sys file not found.

```
Please check the contents of the install disk.
```

The setup program cannot find the FlashBuster driver file "Flbs.sys" which is to be installed.   Please ensure you are using an official FlashBuster for Windows NT setup diskette.   Please ensure the diskette is accessible and readable.

If you copied the setup diskette to your hard disk, please ensure you copied all the files from the diskette.   If you are using a network connection, try copying the setup files to an empty folder (directory) on your hard disk first, then run setup from that folder, instead of using the network connection.

(2)   General file transfer error.

```
Please check your target location and try again.
Error Number: xxxx
```

An error occurred while copying the FlashBuster driver file to the Windows NT driver folder (directory).

Ensure there is enough free disk space on the hard disk where Windows NT is installed. Are you logged into the Administrator's account?   You must have sufficient privileges to read and write the Windows NT system directories.

(3)   Unable to create a directory

```
Unable to create a directory under Windows¥System32.
Please check write access to this directory.
```

An error occurred when the setup program tried to create a directory.   Because the FlashBuster program only uses directories (folders) which already exist, this error should never happen.   If it appears, this means Windows NT is not installed correctly.

(4)   This program requires Windows NT 3.51 or later.

You are trying to install FlashBuster for Windows NT on Windows 95, a version of Windows NT before 3.51, or some other version of Windows.

This driver was designed for Windows NT 3.51, the first version of Windows NT to support PC cards.   It will not run on Windows 95 or earlier versions of Windows. Please contact your service representative or vendor if you need other FlashBuster drivers.

(5)   This program requires VGA or better resolution.

Please use at least a 640 x 480 dot VGA display to run this setup program.

(6)   Sorry, you must have administrator privileges.

```
Sorry, you must have administrator privileges
in order to install this program.  Please log on
as Administrator and rerun setup.
```

The account you are using does not have sufficient privileges to update the Windows NT operating system.   You must log on as Administrator or log on using an account with administrator privileges, in order to install FlashBuster.

(7)   Not enough available disk space

```
There is not enough space available on the disk
C:¥Windows¥SYSTEM32¥DRIVERS
Please free up some space.
```

There is not enough free disk space to install the FlashBuster driver.   You need at least 20 Kbytes.   Exit setup, free some disk space on the drive indicated (drive C: in the message above), then rerun the FlashBuster setup program.

(8)   Failed to create registry key!

(9)   Registry Key does not exist!

(10)   Failed to set registry key and value!

(11)   Failed to get value from registry!

(12)   Registry value incorrect!

(13)   Unknown registry entry type!

These messages indicate some error occurred while registering the FlashBuster driver in the Windows NT registry.   The most common cause is insufficient privileges.   You must use the Administrator account or an account with administrator privileges, otherwise you cannot update the registry.

Another possible cause is the registry has been corrupted.   In this case, restore the registry from a known good backup, and try installing FlashBuster again.

5.2 System Log

(1) This IRQ is not supported for PCCARDs on this system.

```
        Source: Pcmcia            Event ID: 6
    The IRQ of 7 was selected for a network PCMCIA PCCARD.
    This IRQ is not supported for PCCARDs on this system.
    For network service, please change the configuration.
```

The Windows NT PCMCIA driver is complaining that the IRQ you chose for FlashBuster is not supported by your computer's PCMCIA controller hardware.

It seems that certain early PCMCIA controllers did not support or could not use IRQs 8 and above for PC cards. The Windows NT PCMCIA driver thinks the PCMCIA controller in your computer is one of these early types.   So the driver is saying you have selected an unsupported IRQ (IRQ 10, in the example above) for the FlashBuster PC card.

Please refer to your computer's documentation and confirm the type of PCMCIA controller used by your computer.   Your computer should be supported by Windows NT and listed in the Windows NT hardware compatibility list.

We have also seen this log message on computers using the Cirrus Logic PD6720 PCMCIA controllers, running Windows NT 3.51. While the PD6720 does seem to support IRQs 8 and above, the Windows NT 3.51 PCMCIA driver thinks otherwise.

In this case, try to use FlashBuster to format, write, and read a diskette.   If no problems appear, then you can safely ignore the above log message.

(2) The following boot-start or system-start driver(s) failed to load: Pcmcia

```
        Source: Service Control Manager   Event ID: 7026
    The following boot-start or system-start driver(s)
    failed to load: Pcmcia
```

The Windows NT PCMCIA driver failed to load.   The most likely causes are that the PCMCIA controller did not recognize the PCMCIA controller in your computer, or your computer doesn't even have a PCMCIA controller.

Please refer to your computer's documentation and confirm the type of PCMCIA controller used by your computer.   Your computer should be supported by Windows NT and listed on the Windows NT hardware compatibility list.

The FlashBuster setup program automatically enables the Windows NT PCMCIA driver, so the FlashBuster PC card can be recognized and configured when Windows NT starts up.

6. Registry

The FlashBuster setup program makes the following entries in the Windows NT registry.

```
¥Registry¥MACHINE¥SYSTEM¥CurrentControlSet¥Services¥
     Pcmcia
          DataBase
                Y-E DATA
                     External FDD
                          Driver = Flbs


¥Registry¥MACHINE¥SYSTEM¥CurrentControlSet¥Services¥
     Pcmcia
          Start =              REG_DWORD   0x1


¥Registry¥MACHINE¥SYSTEM¥CurrentControlSet¥Services¥
     Flbs
          DisplayName =       FlashBuster Driver
          ErrorControl =      REG_DWORD   0
          Group =             Primary disk
          Start =             REG_DWORD   0x1
          Tag =               REG_DWORD   0x5
          Type =              REG_DWORD   0x1


¥Registry¥MACHINE¥SYSTEM¥CurrentControlSet¥Services¥
     Flbs1
          ErrorControl =      REG_DWORD   1
          Start =             REG_DWORD   0x3
          Type =              REG_DWORD   0x4
          Parameters
                InterruptNumber = REG_DWORD   0xa    (IRQ)
                IoBaseAddress =   REG_DWORD   0x3a8
                IoLength =        REG_DWORD   0x7
                Pcmcia =          REG_DWORD   0x1
```