

Breeze 2

Installation and Configuration Guide

715001951/Revision B

Waters
THE SCIENCE OF WHAT'S POSSIBLE.™

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Waters contact information:

Contacting medium	Information
Internet	The Waters Web site includes contact information for Waters locations worldwide. Visit www.waters.com .
Telephone and fax	From the USA or Canada, phone 800 252-HPLC, or fax 508 872 1990. For other locations worldwide, phone and fax numbers appear in the Waters Web site.
Conventional mail	Waters Corporation 34 Maple Street Milford, MA 01757 USA

Breeze 2 Software

Intended use

Use the Waters Breeze 2 Software for acquiring, processing, reporting, and managing your chromatographic information.

Safety information

See the operator's guides of the instruments or devices associated with this software product for information on how to safely operate and maintain them.

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1 Introduction

This chapter describes Waters® Breeze® 2 software, the hardware and software needed to work with Breeze 2, and the types of chromatographic devices supported.

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Waters Breeze 2 software

The Waters Breeze 2 Software system includes these elements:

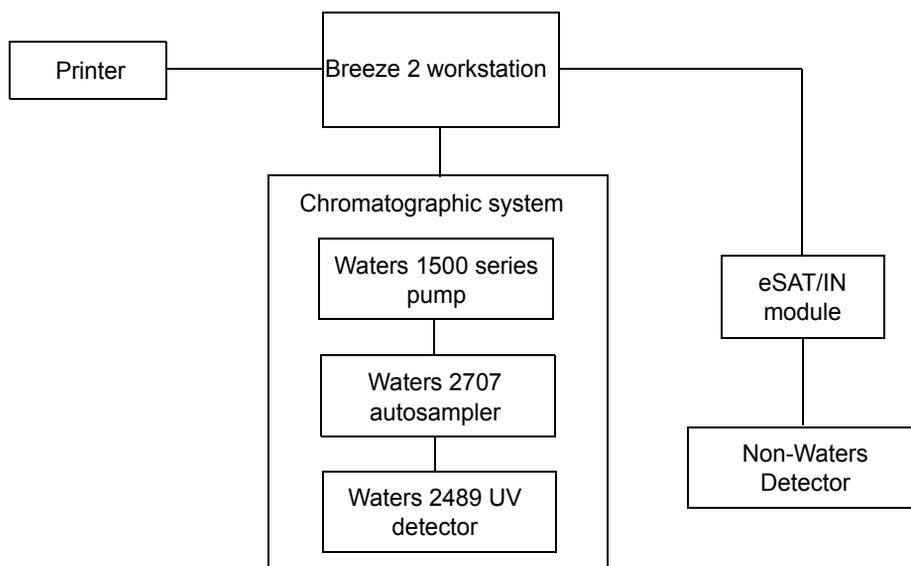
- Chromatographic instrumentation
- Chromatographic data acquisition and data processing computer
- Breeze 2 software, a 32-bit data acquisition and management software application with advanced integrated database architecture

The system acquires, processes, reports, and manages chromatographic information. Breeze 2 offers easy-to-use technology and converts high-quality, accurate results into usable information. It is a complete chromatography and results management system that you can adapt to your individual chromatography requirements by using as many or as few Breeze 2 software capabilities as you require.

Typical system configuration

Breeze 2 operates in a workstation configuration. The following figure shows a typical Breeze 2 workstation configuration.

Typical Breeze 2 workstation configuration



Hardware and software requirements

The following table describes the hardware, software, and operating system requirements for the Breeze 2 workstation.

Requirements for Breeze 2 workstation computer

Component	Minimum
Operating system/ hardware	Windows [®] Vista Business with Service Pack 1, 32-bit Intel [®] Core 2 Duo, 2.13 GHz CPU
Random access memory (RAM)	2 GB
Hard disk drive	50 GB
DVD drive	Access to a DVD drive required
Monitor	Required
Graphics capability	sVGA video at 1024 × 768 × 16 bit color resolution
Printer	Access to a printer required
Optional control card	Waters Bus Laboratory Acquisition and Control/ Environment (busLAC/E [™]) card
Application software	Breeze 2 software
Network interface card	Recommended

Devices supported by Breeze 2

Breeze 2 can support these devices:

- Ethernet devices
- Up to 14 IEEE-488-based devices (within cable length guidelines). For more information, see [“Connecting IEEE-488 chromatographic devices” on page 2-4.](#)
- As many as four busSAT/IN[™] modules, through a busLAC/E card via an I/O distribution box

Breeze 2 does not support mixed IEEE-488 and Ethernet configurations. Breeze 2 requires one of these network configurations:

- All system modules communicate with the data system through an IEEE-488 connection.
- All system modules communicate with the data system through an Ethernet connection.

The following tables list the minimum firmware versions of the devices supported by Breeze 2 at the time of its release.

Ethernet instruments

Device type	Device	Supported firmware version ¹
Detectors	Waters 2414 Refractive Index (RI) Detector	2.04
	Waters 2420 Evaporative Light Scattering Detector	1.00.1057 and above
	Waters 2424 Evaporative Light Scattering Detector	1.20.3743 and above
	Waters 2475 Multi λ Fluorescence Detector	2.01
	Waters 2489 UV/Visible Detector	1.30.1848 and above
	Waters 2998 PDA Detector	1.30.4967 and above
Pumps	Waters 1525 and 1515 Pumps	3.00
	Waters 1525 μ and 1525EF Pumps	3.00
Autosamplers	Waters 2707 Autosampler	1.00.1206 and above
Interfaces and Accessories	Temperature control system II (TCM II)	3.02
	Waters Pump Control Module II (PCM II)	4.00
	Waters 1500 Column Heater	1.02
	Waters e-SAT/IN Module	1.10.1015 and above

1. You can find the firmware revision number on the instrument specification plate or front panel display.

Before you install an IEEE-488 device in the Breeze 2 system, verify that the firmware of the device is the minimum version listed in the following table.

Supported IEEE-488 devices

Device type	Device	Supported firmware version ¹
Pumps	Waters 515 pump (with PCM or PCM II)	1.5
	Waters 1525 and 1515 pumps (with PCM or PCM II)	2.02
	Waters 1525 μ and 1525EF pumps (with PCM or PCM II)	2.11
Interfaces and Accessories	Waters Temperature Control Module (TCM)	2.1
	Waters Temperature Control Module II (TCM II)	3.0
	Waters Pump Control Module (PCM)	2.2
	Waters Pump Control Module II (PCM II)	3.0
	Waters 1500 Column Heater	1.02
	Waters Bus SAT/IN Module	20
Detectors	Waters 410 Refractive Index Detector	4.30
	Waters 2410 Refractive Index Detector (appears as 410)	5.1
	Waters 2414 Refractive Index Detector (2410 emulation mode)	1.0
	Waters 2487 Dual λ Absorbance Detector	1.01
Autosamplers	Waters 717plus Autosampler	3.1

1. You can find the firmware revision number on the instrument specification plate or front panel display.

Optional interface cards

Breeze 2 supports these optional interface cards:

- Network interface card for Ethernet instruments
- busLAC/E (IEEE-488 interface) card for connecting Waters IEEE-488 devices

Network interface card for Ethernet instruments

A Breeze 2 workstation can use a network interface card (NIC) to communicate with Ethernet instruments. Refer to the *Waters Ethernet Instrument Getting Started Guide* for detailed information.

busLAC/E card

The busLAC/E card is a microprocessor-based interface card that transmits commands from Breeze 2 software to detectors, autosamplers, pumps, and other devices over the IEEE-488 and custom interfaces via an IEEE-488 cable. Data from the devices are transmitted through the busLAC/E card to the computer for analysis.

The Breeze 2 workstation can use a busLAC/E card to function with Breeze 2. Chromatographic devices can connect to the busLAC/E card.

The busLAC/E card performs two primary functions:

- Acquires data from a detector and transmits the data to the computer
- Controls chromatographic devices

The maximum total aggregate data rate depends on the instrument type:

- For all detectors connected to the busLAC/E card, a maximum total aggregate data rate of 400 points per second is supported.
- For each busSAT/IN™ connected to the busLAC/E card, a maximum total aggregate data rate of 100 points per second (50 points per channel) is supported.

2

Installing and configuring the hardware

This chapter tells you how to install and configure the hardware for the Waters Breeze 2 software system.

If your Waters technical service representative has already installed and configured the system for you, proceed to [“Powering-on the system” on page 2-12](#).

Recommendation: Before installing any hardware or software, perform a full backup of your hard drives (see the instructions provided by the manufacturer of your computer).

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Selecting the site

Locate the Breeze 2 system in a clean area, free from shock, vibration, and extremes of temperature and humidity.

Environmental requirements

The Breeze 2 system is designed to operate within the following temperature and humidity ranges:

- Temperature: 10 to 31°C (50 to 88°F)
- Humidity: 20 to 80% relative humidity, noncondensing, maximum wet bulb of 25°C and minimum dew point of 2°C

Acceptable temperature and humidity ranges vary according to the model of computer and printer.

Protect equipment from direct sunlight, heat registers, or air conditioning vents.

Bench space

Allow sufficient bench space for the Breeze 2 workstation (keyboard, monitor, system unit, and printer) as recommended in the documentation supplied with the computer. You can place the computer on the lab bench or on a desktop near the chromatography instrumentation. The total bench space you require depends upon the number of devices you plan to configure (pumps, detectors, autosamplers, eSAT/IN modules, and so on).

Cable lengths

You can connect up to 14 IEEE-488-based devices to the Breeze 2 system. To ensure proper signal transmission, arrange the components of your chromatographic system to minimize cable lengths. Always follow the cable length guidelines listed in [“Making cable connections” on page 2-6](#).

Instrument arrangement

Make sure the ventilation slots on all instruments are not blocked. Allow at least 15 cm (6 inches) of space on all sides of each instrument to ensure adequate air flow.

For information on the best arrangement of your Breeze 2 system and connected instruments, consult your Waters technical service representative.

Installing and configuring the computer system

This section describes the process for installing and configuring the Breeze 2 computer system and other components.

To install and set up the Breeze 2 workstation

1. Unpack and place the workstation in the desired location.
2. Attach the keyboard, mouse, and monitor to the workstation.
3. To install other computer peripherals, such as a printer, see the installation documentation supplied with the device.
4. Connect and configure the serial or Ethernet devices (see [“Connecting Ethernet devices” on page 2-3](#)).
5. Ensure that the busLAC/E (IEEE-488 interface) card is installed in the workstation and is set up correctly.
6. Connect the IEEE-488 chromatography instruments to the busLAC/E card in the workstation using the IEEE-488 cable (see [“Connecting IEEE-488 chromatographic devices” on page 2-4](#)).
7. Power-on the workstation (see [“Powering-on the system” on page 2-12](#)).

Connecting Ethernet devices

Ethernet instruments connect directly to the network interface card in the computer. If you are connecting multiple Ethernet instruments, use a Waters-supplied switch to connect the Ethernet cable from the computer to the switch, and then plug each instrument into the switch.



Caution: The Breeze 2 system does not support the use of an Ethernet hub.

Triggering of devices, such as 2489, 2998, 2414, and 2424 detectors, occurs over the Ethernet cable and so requires no external trigger cables.

Exception: Waters 2475 Fluorescence Detector, V2.02 requires an external trigger cable under Ethernet control.

You must assign an IP address to the network interface card and enable DHCP so that it can assign IP addresses to your Ethernet instruments.

To set the network card IP address

Requirement: Breeze 2 software must first be installed on the workstation.

1. From the Manage menu, select Systems.
2. In the Manage Systems dialog box, click Node Properties.
3. On the Instruments tab of the Breeze 2 Node Properties page, configure the IP address. For details, see the *Ethernet Instrument Getting Started Guide* or see the topic “Configuring chromatographic instruments” in the Breeze 2 Help.

Connecting serial devices

You can use a busSAT/IN module to collect the analog output signals of non-IEEE-488 devices (such as non-Waters detectors). A busSAT/IN module converts the analog output signals to digital signals then transmits them to the busLAC/E card, via an I/O distribution box. Supported serial chromatography devices connect through an I/O distribution box or a PC COM port.

Connecting IEEE-488 chromatographic devices

The IEEE-488 bus is an instrument interface that connects devices using one communication protocol. In the Breeze 2 system, the IEEE-488 interface connects Waters IEEE-488 chromatography devices to the busLAC/E card.

The busLAC/E card is an instrument controller that assigns the role of active “talker” or “listener” to each attached device on the IEEE-488 bus. Each instrument designated as an active talker supplies information to the other devices on the IEEE-488 bus. Each device designated as a listener receives information from an active talker device. Only one active talker is allowed at a time, but several listeners can be active simultaneously.

busLAC/E card connections

The busLAC/E card connects to peripheral devices through two ports on the rear edge of the card as follows:

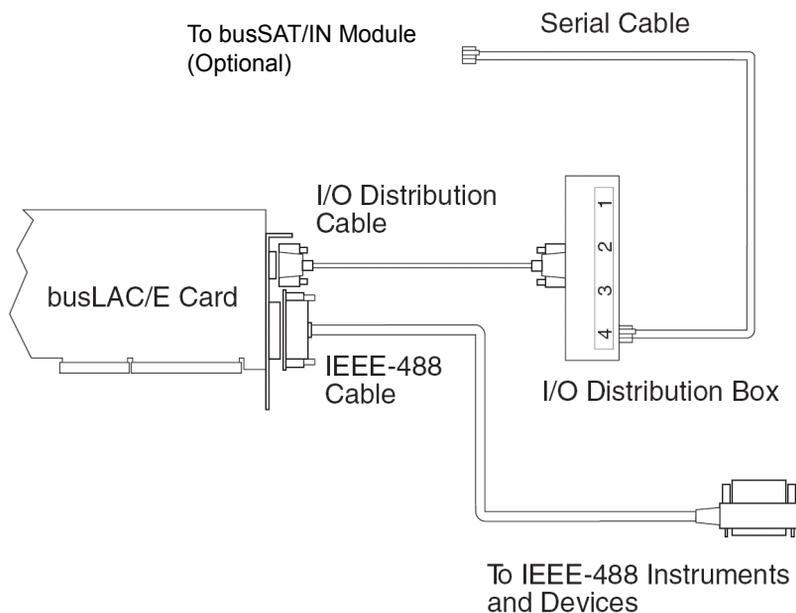
- IEEE-488 port – Used for connecting to IEEE-488-controlled devices such as the Waters 717plus Autosampler and the Waters 2487 Dual λ Absorbance Detector
- Serial port – Used for connecting to serial devices, such as the Waters busSAT/IN Module, via an I/O distribution box.

Tip: For a complete list of devices and firmware supported by the Breeze 2 system, see [“Devices supported by Breeze 2” on page 1-3](#).

An IEEE-488 cable connects the 2487 absorbance detectors and other IEEE-488 devices to the busLAC/E card.

The I/O distribution box connects to the busLAC/E card. BusSAT/IN modules communicate with the busLAC/E card through the I/O distribution box over serial cables. The I/O distribution box allows you to connect as many as four busSAT/IN modules, each of which can connect to two analog detector outputs.

busLAC/E card port connections



Triggering of devices, such as 2487, 2414, and 2410 detectors, occurs over the IEEE-488 cable and so requires no external trigger cables.

Making cable connections

The Breeze 2 system supports the Waters IEEE-488 devices listed in the table on [page 1-5](#).

When connecting IEEE-488 devices, observe these guidelines:

- The maximum number of devices that you can connect to form one interface system is 15 (14 instruments plus the busLAC/E card).
- Arrange the components of your chromatographic system to minimize cable lengths.
 - The maximum cable length between two devices is 4 meters (13 feet).
 - The minimum cable length between two devices is 1 meter (3.25 feet)



Caution: Cable lengths greater than the maximum values or less than the minimum values can cause IEEE-488 communication failures.

- The maximum total cable length connecting the devices and the busLAC/E card in one interface system is 2 meters (6.5 feet) multiplied by the number of devices, or 20 meters (65 feet), whichever is *smaller* (see the table below).

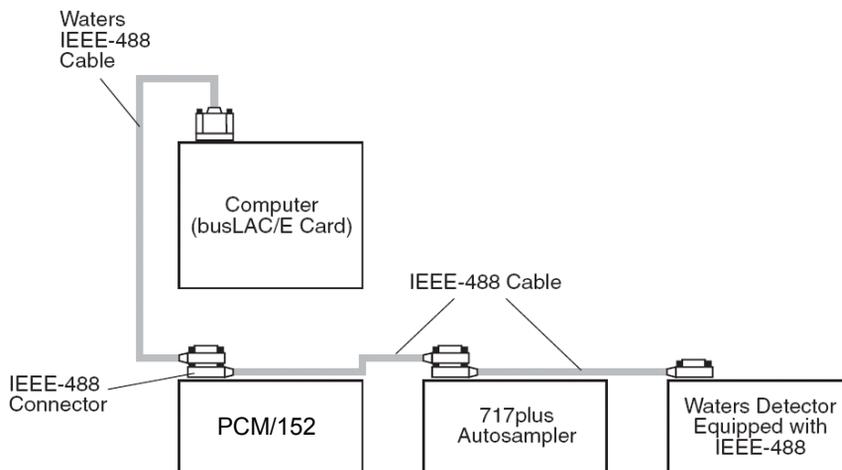
Maximum cable lengths for IEEE-488 devices

Number of devices connected	Maximum total cable length (meters)
1	4
2	6
3	8
4	10
5	12
6	14
7	16
8	18
9-14	20

To connect IEEE-488 devices

1. Connect the single-receptacle end of the in-line IEEE-488 cable (supplied with the Breeze 2 system) to the busLAC/E card.

Example of IEEE-488 cable connections



2. Connect the other end of the IEEE-488 cable (with the stackable connector for daisy-chaining additional instruments) to the IEEE-488 connector on an instrument.
3. Use one end of another IEEE-488 cable to connect to the stackable connector on the first instrument. Connect the other end of the cable to the IEEE-488 port on the next instrument.
4. Repeat [step 3](#) for each additional instrument, up to 14 IEEE-488 instruments. See the [table titled “Maximum cable lengths for IEEE-488 devices” on page 2-6](#) for cable-length limitations.

Tip: The order in which you connect IEEE-488 devices to the busLAC/E card is not important. For example, you can connect the injector before or after the detector.

5. Ensure that all IEEE-488 cable connector screws are finger-tight.

Making device connections

PCM connections

The Waters Pump Control Module (PCM) is an IEEE-488 device that controls the 500- and 1500-series pumps. Connect the PCM to the IEEE-488 bus.

Note: You can connect the PCM II through the Ethernet or IEEE-488 interface.

TCM connections

The Waters Temperature Control Module (TCM) is an IEEE-488 device that regulates the temperature of as many as three column heaters. Connect the TCM to the IEEE-488 bus.

Note: You can connect the TCM II through the Ethernet or IEEE-488 interface.

Injector connections

Manual injectors require an inject-start trigger wire connection. The inject-start trigger signal (contact closure) instructs detectors and system controllers to acquire data or run methods.

Waters autosamplers transmit the inject-start signal over the IEEE-488 bus or by trigger wire.

If you connect a Waters 717plus Autosampler to an IEEE-488 interface, you need not make additional connections for an inject-start signal. When under IEEE-488 control, the 717plus transmits the inject-start signal directly over the IEEE-488 bus during data acquisition. All controlled devices are triggered simultaneously when an injection is made by these instruments.

Trigger wires are not required when all instruments in a chromatographic system are controlled over the IEEE-488 bus.

Detector connections

Detectors with an installed IEEE-488 interface can be connected directly to the busLAC/E card.

Setting IEEE-488 device addresses

You must set a unique address for each device connected on the IEEE-488 bus so that the busLAC/E card recognizes each device. Valid IEEE-488 instrument addresses are 2 through 29.

Recommendation: Use IEEE addresses 9 and above, spacing the addresses by a difference of 2. Example: 9, 11, 13, and so on.

Set the IEEE-488 addresses of the Waters instruments in your system through either the software (accessed from the front panel of the instrument) or DIP switches.

Setting IEEE-488 addresses

Instrument	IEEE-488 address set by
1500 series pumps	DIP switches
1500 series column heater	DIP switches
410 detector	DIP switches
2410 detector	Software
2487 detector	Software
717plus autosampler	Software
PCM	DIP switches
TCM	DIP switches
Bus SAT/IN	DIP switches

Setting IEEE-488 addresses using software

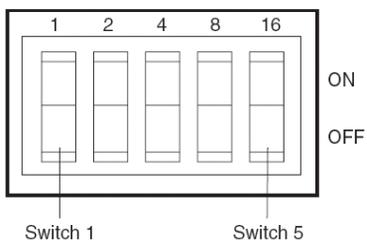
To set an IEEE-488 address using software, set the address from the front panel of the device. See the operator's guide for a particular device for detailed instructions on setting the IEEE-488 address.

Setting IEEE-488 addresses using DIP switches

For the 1500 series pump, 1500 series column heater, 410 detector, PCM, TCM, and Bus SAT/IN, use the DIP switches to set the IEEE-488 address.

The following figure shows the arrangement of DIP switches on a DIP switch block (on the rear panel of a device).

DIP switch block



To set an IEEE-488 address from a DIP switch

1. Ensure that no instruments are connected to the busLAC/E card.
2. Power-off the IEEE-488 device.
3. Using the DIP switches on the rear panel of the device (see the figure, above), set a unique IEEE-488 address for the device.

Tip: Although there are 28 valid addresses (2 through 29), IEEE-488 protocol allows up to 14 devices.

Set the IEEE-488 address according to the table below.

4. Power-on the device.

Settings for the Waters 1500 series pumps, 410, PCM, and TCM

IEEE-488 address	DIP switch settings ¹				
	1	2	4	8	16
2	OFF	ON	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF
5	ON	OFF	ON	OFF	OFF
6	OFF	ON	ON	OFF	OFF
7	ON	ON	ON	OFF	OFF
8	OFF	OFF	OFF	ON	OFF
9	ON	OFF	OFF	ON	OFF
10	OFF	ON	OFF	ON	OFF
11	ON	ON	OFF	ON	OFF

Settings for the Waters 1500 series pumps, 410, PCM, and TCM (Continued)

IEEE-488 address	DIP switch settings ¹				
	1	2	4	8	16
12	OFF	OFF	ON	ON	OFF
13	ON	OFF	ON	ON	OFF
14	OFF	ON	ON	ON	OFF
15	ON	ON	ON	ON	OFF
16	OFF	OFF	OFF	OFF	ON
17	ON	OFF	OFF	OFF	ON
18	OFF	ON	OFF	OFF	ON
19	ON	ON	OFF	OFF	ON
20	OFF	OFF	ON	OFF	ON
21	ON	OFF	ON	OFF	ON
22	OFF	ON	ON	OFF	ON
23	ON	ON	ON	OFF	ON
24	OFF	OFF	OFF	ON	ON
25	ON	OFF	OFF	ON	ON
26	OFF	ON	OFF	ON	ON
27	ON	ON	OFF	ON	ON
28	OFF	OFF	ON	ON	ON
29	ON	OFF	ON	ON	ON

1. ON = Closed or 1. OFF = Open or 0.

Scanning the IEEE-488 bus

After you set the IEEE-488 address for a device, the busLAC/E card must scan the IEEE-488 bus. To scan the IEEE-488 bus, see “Configuring chromatographic instruments” in the *Breeze 2 Help*.

Powering-on the system

This section contains the startup sequence for the Breeze 2 system and its peripheral equipment.

Powering-on the Breeze 2 system entails powering-on the individual instruments and devices in a particular sequence.

Always observe these power guidelines:

- Keep *all* devices powered-on while your system is in use.
- While a system is active on the IEEE-488 bus, do not power-on or power-off any device on the bus.

To power-on instruments and devices



Caution: Ensure that the computer's power supply is set to the correct voltage for your site. If it is set incorrectly, your computer can be damaged.

1. Power-on all equipment controlled through the IEEE-488 bus, waiting until any internal diagnostic tests finish.

Restriction: You cannot run methods or use Run Samples unless all devices on the IEEE-488 bus that are assigned to a Breeze 2 system are powered-on and have successfully completed any calibration tests.

Requirement: Power-on the pumps of an LC system first, to establish a flow before powering-on the detectors. Do not power-on (or power-off) instruments connected to a bus running any systems.

2. Power-on the computer.
3. Power-on all equipment controlled by the Breeze 2 system that is not under IEEE-488 control; that is, all equipment controlled through the I/O distribution box (busSAT/IN Modules and connected analog detectors).
4. Power-on all equipment not controlled by the Breeze 2 system (for example, computer peripherals such as printers).

3

Installing and configuring the software

This chapter explains how to install Breeze 2 software on a Breeze 2 workstation.

Recommendation: Before installing any hardware or software, perform a full backup of your hard drives (see the instructions provided by the manufacturer of your computer).

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Requirements

Complete these tasks before you begin the installation:

1. Ensure the workstation has the required hardware and software, as specified in the [table titled “Requirements for Breeze 2 workstation computer” on page 1-3](#).
2. Log in to the operating system using an account with Administrator privileges.
3. Back up and defragment the hard drive (see the Microsoft documentation and Help system) to ensure smooth installation of and optimum performance from Breeze 2.
4. Configure Windows Vista so that the virtual memory setting automatically manages the paging file size.
5. Close all applications, and then restart the workstation.
6. Verify that the hard drive has at least 7000 MB (7 GB) of free space, to accommodate the added software.

When you start the installation, the combined free disk space of all local drives must equal or exceed 7 GB. The installation stops if you are not in an administrator group account, the operating system is unsupported (for example, Windows XP), available memory is less than 256 MB, or Windows Vista Business is not updated with the correct service pack.

Installing Breeze 2 software

You install Breeze 2 software from the Breeze 2 DVD. You can perform a *typical* installation to install the software on the C-drive or default location, or a *custom* installation to specify a different drive. Allow approximately 30 minutes to install the software.

Starting the installation

To install Breeze 2

1. Insert the Breeze 2 DVD into the DVD drive.
2. Browse to the Breeze2 folder on the DVD, right-click the Breeze2setup.exe file, and then select “Run as administrator”.

3. On the Choose Setup Language page, select a language from the drop-down list, and then click OK.

Requirement: If Microsoft .NET Framework 3.0 software is not installed on your system, the Requirement wizard page appears. On that page, you must click Install.

4. On the Welcome page, click Next.
5. On the License Agreement page, accept the license agreement, and then click Next.
6. On the Customer Information page, enter your user name, organization, and serial number, and then click Next.
7. On the Setup Type page, leave Typical selected, and then click Next.

Alternative: Select Custom if you want to install the software on a drive other than C, then continue with the next section, “Finishing a custom installation”.

8. On the Ready to Install the Program page, click Install to start the installation.

Result: The Breeze 2 Setup wizard installs the Breeze 2 and Oracle program files on the hard drive. This process can take several minutes.

9. On the Install Shield Wizard complete page, click Finish.
10. Click Yes at the next page to restart the workstation and then continue with [“Completing the installation” on page 3-4](#).

Finishing a custom installation

If you selected Custom in [step 7](#) of “Starting the installation”, complete the installation as follows.

To finish a custom installation

1. On the Custom Setup page, specify the program features you want to install.

Tip: By default, the “Install to” location points to drive C.

To designate drives other than drive C, click an icon (for example, Breeze 2 Oracle Files and Database), and then click the Change Feature Location button.

2. On the Change Current Destination Folder page, select the desired drive, and then click OK to return to the Custom Setup page.
3. Repeat step 2 for all feature locations, and then click Next.
4. On the Ready to Install the Program page, click Install to start the installation.
Result: The Breeze 2 Setup wizard installs the Breeze 2 and Oracle program files on the hard drive, a process that can take several minutes.
5. On the Install Shield Wizard complete page, click Finish.
6. Click Yes at the next page to restart the computer, and then continue with the next section.

Completing the installation

After the computer restarts, complete the installation:

- Log in to the operating system using an account with Administrator privileges.
Tip: The account must be the same one that you logged in to when starting the installation.
- If your system includes a busLAC/E card, you must install and configure the busLAC/E driver for Breeze 2. Follow the procedure in the next section, [“Installing and configuring a busLAC/E driver” on page 3-5](#).
- If you want to install software support for one or more Ethernet instruments, use the Waters Instrument Control Options Pack (ICOP) setup program, located on the Breeze 2 media:
 1. Browse to the appropriate language folder on the DVD and locate the setup.exe file.
 2. Right-click the file, and then select “Run as Administrator.”
 3. Follow the prompts to install the software support you need.
- Install the Breeze 2 license (see [“Installing the Breeze 2 license” on page 3-6](#)).
- Verify the installed files (see [“Verifying installed files” on page 3-8](#)).

Installing and configuring a busLAC/E driver

After you install Breeze 2, install and configure the busLAC/E driver.

Requirement: Insert the Breeze 2 disk into the computer's DVD drive before beginning this procedure.

Tip: If the Found New Hardware Wizard dialog box appears automatically, start with step 5. If the dialog box fails to appear, follow the procedures for accessing the wizard manually.

To install and configure the busLAC/E driver

1. From the Start menu, right-click Computer, and then select Manage.
2. On the Computer Management page, click Computer Management (Local) > System Tools > Device Manager.
3. In the right-hand pane, locate System devices> PCI Device.
4. Right-click PCI Device, and then select Properties.
5. In the General tab on the PCI Device Properties page, click the Reinstall Driver button.
6. On the Found New Hardware - PCI Device page, select "Browse my computer for driver software (advanced)".
7. Under "Browse for driver software on your computer", click the Browse button, and navigate to the BuslaceDrivers folder on the Breeze 2 DVD.
8. Select the checkbox "Include subfolders" and then click Next.
9. When the Windows security message "Would you like to install this device software?" appears, click Install.
10. When the installation is complete, restart your computer.

Result: The BusLAC/E driver is installed appearing as "Buslace PCI KMDF Device Driver", under BusLAC/E Drivers in Device Manager.

Installing the Breeze 2 license

About licenses

You use the Waters Software License Management System to manage the Breeze 2 software license. You must install the Breeze 2 software license to access the Breeze 2 software. The Breeze 2 serial number purchased from Waters is required for activating or deactivating the Breeze 2 license through the Waters Licensing Wizard.

For each Breeze 2 License you install, you can create five active user accounts on the Breeze 2 workstation. Breeze 2 also includes a default “breeze” user account for you to use when you initially log on. No password is required.

To view active licenses, use the Show Licenses option in the Waters Licensing Wizard.

If you need to transfer a license from one Breeze 2 workstation to another, you must deactivate it from the original workstation before you activate it in a new workstation.



Caution: Do not uninstall Breeze 2 software until after you uninstall the license. Otherwise the license becomes unusable.

To install the Breeze 2 software key

1. Log in to the workstation (where you installed Breeze 2) as an administrator user.
2. From the Start menu, click Start > All Programs > Breeze 2 > Waters Licensing Wizard.
3. On the task page, click “Request software registration”.
4. On the “Request software registration – Create registration file” page, enter a valid name and location for your software registration file, and then click Next.

Tip: This file stores your software registration information.

5. When the “Request software registration – Registration file created” page appears, click the address link.

Tip: If your computer has Internet access, it connects to the Waters License Activation Center Web site where you complete the request process and receive your license activation file.

If your computer does not have Internet access, move the software registration file that you just created to a computer with Internet access so you can relay your request to Waters. Connect to the Waters License Activation Center Web site. Follow the instructions to activate your license. After you receive the license activation file from the Web site, move the file back to the Breeze 2 computer so that you can activate your license.

6. Go to the Waters Licensing Wizard task page, and select Activate Licenses.
7. Select the license activation file you downloaded from the Waters License Activation Center Web site, and then click Next.

Requirement: You must complete the activation process using the Breeze 2 computer on which you created the software registration file.

8. Click Finish.

Result: The License Activation Complete page indicates that the Breeze 2 license is successfully activated.

Uninstalling the Breeze 2 license

If you want to transfer the Breeze 2 license from one workstation to another, you must first uninstall the license from its current workstation using the Waters Licensing Wizard.

To uninstall a license

1. Log in to the workstation (where you installed Breeze 2 software) as an administrator user.
2. From the Start menu, click Start > All Programs > Breeze 2 > Waters Licensing Wizard.
3. On the task page, click Deactivate Licenses.
4. On the “Deactivate Licenses – Select Licenses” page, select the license you want to deactivate, and then click Next.

5. On the “Deactivate Licenses – Create deactivation file” page, enter a valid name and location for your license deactivation file.

Tip: This file stores your license deactivation information.

6. Click Next.

7. When the “Deactivate Licenses – Deactivation file created” page appears, note the file location, and then click the address link.

Tip: If your computer has Internet access, it connects to the Waters License Activation Center Web site, where you complete the deactivation process.

If your computer does not have Internet access, move the license deactivation file that you just created to a computer with Internet access so that you can relay your request to Waters.

8. On the Waters License Activation Center Web site, select Deactivate Licenses, and follow the instructions to deactivate your license.

Requirement: Load the license deactivation file created in step 7.

When the process is complete, a confirmation page appears that lists the deactivated license.

Verifying installed files

The Breeze 2 Setup wizard creates a Breeze 2 program folder in the Start menu. The Breeze 2 program folder contains these items:

- Breeze 2 – Starts the Breeze software and displays the Breeze 2 Login page. After you log in, you can select one of several Breeze 2 applications. For details, see “Starting and exiting from Breeze” in the Breeze Help.
- Breeze 2 Help– Starts the online help application.
- Breeze 2 Installation Log – Contains information about the current installation.
- Verify Files – Verifies the integrity of the Breeze software files on your hard disk.
- File Verification Results – displays the results of the file verification utility in a text file.
- Waters Licensing Wizard – Starts the Waters Licensing Wizard, which you can use to request software registration, activate and deactivate licenses, or view Waters licenses and their serial numbers.

Viewing the installation log

The installation log contains information about your Breeze 2 installations. You can read the log file to review your installation choices. In case of a partial or unsuccessful installation, you can review the installation log to check for errors.

To view the installation log

1. Click Start > All Programs > Breeze 2 > Installation Log.
Result: The program displays the Breeze.log file in Notepad.
2. Review the contents of the Installation Log file.
3. Click File > Exit.

Using the file verification utility

The file verification utility checks the integrity of the installed Breeze 2 program, data files, and database files, ensuring that the Breeze 2 files did not change since installation.

After the installation, run the file verification utility to verify the Breeze 2 software program files.

To run the file verification utility

1. Click Start > All Programs > Breeze 2 > Verify Files.
Result: The file verification utility compares the installed Breeze files checksum with a previously stored checksum and then creates a file verification results log.
2. Review the contents of the file. Print or save a copy of the results.
3. Click File > Exit.

Checking for Breeze 2 service packs

Waters periodically releases service packs to address existing issues or to provide enhanced functionality. Available for downloading from the Waters Elite Web site, you install them according to the instructions contained in their associated release notes. If you want physical media, note the part number from the Web site and contact your local Waters subsidiary to place an order.

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