

DVVA II 4000

Analysis System

Pre-Installation Instructions and Checklist

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Overview

This document describes how to prepare your site for installation of the DVVA II 4000 system. *Part 1 Pre-Installation Instructions* contains information that will help you examine your site and answer the questions in the checklist.

Part 2 Pre-Installation Checklist contains questions about analyzer location and your laboratory environment, equipment, and supplies. For each question, check **Yes** if the condition applies to your laboratory, **No** if it does not, or **N/A** if it is not applicable to your DVVA II 4000 system. When you have completed the checklist, return it to Micromeritics as described on page 6.

Part 1: Pre-Installation Instructions

Unpacking and Inspection

When the analyzer is received, unpack and inspect the contents of the shipping carton(s). Use the packing list to verify that all products, accessories, software, and documentation are received intact and in the correct quantity. Inspect the shipping carton(s) and contents within a couple of days in the event damage or loss has occurred (see **Shipping Damage**).

Shipping Damage

If equipment is damaged or lost in transit, you are required to make note of the damage or loss on the freight bill. The freight carrier, not Micromeritics, is responsible for all damage or loss occurring during shipment. If you discover damage or loss of equipment during shipment, report the condition to the carrier immediately. Insurance claims **MUST** be made with the freight carrier, **NOT** Micromeritics.

DO:

- Keep all software, manuals, and accessories with the analyzer.
- Keep all boxes and shipping cartons until the installation is complete.
- Report any shipping damage immediately to the carrier and follow their directions.
- Report missing or wrong parts to Micromeritics, in addition to any shipping damage, only after filing a claim with the carrier.

DO NOT:

- Ask Micromeritics to file a claim for shipping damage.
- Discard shipping boxes and containers until installation is complete.

Analyzer and Power Conditioner Specifications

An unobstructed lab work space must accommodate the DVVA II 4000 specifications.
A supplemental Power Conditioner that is dedicated for use with the DVVA II 4000 is required.

**DVVA II 4000:**

Height: 190 cm (6 ft, 3 in.)

Width: 69 cm (2 ft, 3 in.)

Depth: 79 cm (2 ft, 7 in.)

Weight: 329 kg (725 lbs)

Power Conditioner (domestic):

Height: 8.89 cm (3.5 in.)

Width: 43.18 cm (17 in.)

Depth: 42.93 cm (16.9 in.)

Weight: 17 kg (36.9 lbs)

Power Conditioner Requirements

The Power Conditioner must meet the criteria listed below. If you do not have a Power Conditioner that meets these criteria, then one will be provided to you at no cost.

| General | |
|---|--|
| UPS Topology / Architecture | On-Line or Double-Conversion |
| Input | |
| Voltage | In-Country (local) Mains Voltage |
| Input Frequency Range | In-Country (local) Mains Frequency (normally 40 Hz - 70 Hz) |
| Cold Start | Yes |
| Plug Type | In-Country (local) Mains Plug |
| Output | |
| VA | 1,500 |
| Watts | 1,350 |
| On Battery Voltage | In-Country (local) Mains Voltage |
| On Battery Frequency | In-Country (local) Mains Frequency |
| On Battery Waveform | Sine Wave |
| Outlet Type | In-Country (local) Mains Plug |
| Outlets (Total) | Varies. Only need 2 for the DVVA II 4000 (analyzer and computer) |
| Transfer Time | 0ms |
| Surge Protection & Filtering | |
| Surge Suppression | Yes |
| EMI/RFI Filtration | Yes |

The Power Conditioner that ships domestically with the DVVA II 4000 is Micromeritics P/N 003-40120-00 (Pure Sine Online). Dimensions and weights may vary for other Power Conditioners supplied locally in international markets.

Installation Guidelines

The following guidelines are recommended when selecting the location for both the analyzer and Power Conditioner.

DO:

- Control room temperature and humidity limits of the lab work space. The analyzer performs best in a constant temperature environment, where the temperature is **stable between +15 °C to 35 °C** and humidity is controlled to **20 to 80% relative (non-condensing)**.
- Select a location free of drafts from either a forced-air heating or cooling system.
- Plug the Power Conditioner into its own, dedicated power line via standard wall receptacle. The DVVA II 4000 is designed to operate with 100/120/230 VAC at 50 or 60 Hz. Noise-free power of the correct voltage and frequency (with a safety earth ground) should be available through the Power Conditioner.
- Ensure the analyzer, computer, and other supported peripheral devices are plugged into the bank of outlets on the rear panel of the Power Conditioner. Refer to the Power Conditioner user manual for a complete list of supported peripheral devices.

DO NOT:

- Plug any large electrical devices into the Power Conditioner to avoid overloading and possibly damaging the unit; for example, motors, generators, ovens, laser printers, copiers, space heaters, vacuums, paper shredders, etc.
- Allow room temperature and humidity to exceed limits.
- Install the analyzer where it is exposed to direct sunlight.

Analyzer Placement

The analyzer must be unpacked and moved to the desired location prior to installation. The analyzer has a lifting eye attached to its top panel so that a hoist can be used to lift the analyzer from the pallet.



The DVVA 4000 weighs 329 kg (725 lbs) pounds and is 190 cm (6 ft, 3 in.) high. Do not attempt to lift the analyzer without proper equipment. Follow your company's safety procedures for uncrating and moving heavy equipment.

Power Conditioner Placement

The Power Conditioner must be moved to the desired location prior to installation. Refer to the Power Conditioner user manual for a list of available orientation options.

The Power Conditioner must be near a wall outlet as a power source, yet also close enough to the DVVA II 4000, computer, and other supported peripheral devices so they can plug into the banks of outlets on the rear panel. Refer to the Power Conditioner user manual for a complete list of supported peripheral devices.

Computer System

We recommend that you purchase the computer to be used with the DVVA II 4000 Analyzer from Micromeritics. We thoroughly test Microsoft Windows® operating systems with our application and offer technical support and maintenance for the computers we provide.

If you are supplying your own computer, it must meet the following *minimum* requirements:

- Pentium 1.6 GHz (or equivalent)
- One CD ROM drive
- USB 2.0 connector
- 128 megabytes of main memory
- 2-gigabyte hard disk space
- Monitor supporting 1024 x 768 resolution
- Windows 7, Windows XP Professional, or Windows Vista

Computer Administrator

If a Computer Administrator at your facility will be needed to set up the computer or install software, please enter the administrator's name in the checklist and ensure that he or she will be available during the installation.

Laboratory Equipment and Supplies

- 10 grams of SRB series carbon black reference material
- Balance
- Drying oven (if used)

Projected Installation Date

After reading the site preparation requirements in this document, select a date by which your site will be prepared, and on which you would like to schedule installation. Enter the date on page 10 of the Checklist. After you return the Checklist to Micromeritics, your Micromeritics representative will contact you to confirm an installation date.

Hazards & Precautions

Inform Micromeritics of any onsite conditions that may present hazards to Micromeritics employees or equipment. Advise Micromeritics of any precautions that need to be taken.

Safety Measures

Inform Micromeritics of any safety equipment, requirements, or safety measures necessary for Micromeritics' employees to enter and install the DVVA II 4000 at your facility.

Personnel Security Clearance

If security clearances, insurance certificates, or any other special arrangements are required for Micromeritics employees to enter your facility, please explain on page 9. Please inform Micromeritics how much advance notice you require to obtain clearance.

Commitment Statement/Signature

Read this document carefully and complete the checklist. If you are unsure about any part of this document or the checklist, please contact the Micromeritics Service Department for clarification. When you have completed the Pre-Installation Checklist, date it, and either FAX or MAIL it to Micromeritics as described below.

Within the United States:

| | |
|--------------------|---|
| FAX Checklist to: | Service Operations Manager (770) 662-3604 |
| OR | |
| MAIL Checklist to: | Micromeritics Corporation 4356 Communications Drive Norcross, Georgia 30093 Attn: Service Operations Manager |

Outside the United States: Contact your local Micromeritics representative.

Part 2: Pre-Installation Checklist

Unpacking and Inspection

| | Yes | No |
|---|-----|-----|
| Have the shipping cartons been unpacked and their contents inspected? | ___ | ___ |
| Was there any shipping damage? | ___ | ___ |
| If Yes , has a claim been filed with the freight carrier? | ___ | ___ |
| Were all items listed on the packing list received? | ___ | ___ |
| If No , has Micromeritics been notified? | ___ | ___ |

Analyzer Placement

| | Yes | No |
|---|-----|-----|
| Can the lab area where the DVVA II 4000 analyzer will be placed accommodate the combined dimensions of the analyzer, Power Conditioner, and other supported peripheral devices? | ___ | ___ |
| Has the analyzer been uncrated and moved to the desired location? | ___ | ___ |

Power Conditioner Placement

| | Yes | No |
|--|-----|-----|
| Do you have a Power Conditioner that meets the criteria listed on page 3 of this document that can be dedicated for use with the DVVA II 4000? | ___ | ___ |
| If No , has Micromeritics been notified? | ___ | ___ |
| If Yes , has the Power Conditioner been moved to the desired location near a wall outlet as a power source, yet also close enough to the DVVA II 4000, computer, and other supported peripheral devices so they can plug into the banks of outlets on the rear panel? | ___ | ___ |

Environmental Factors

| | Yes | No |
|---|------------|-----------|
| Is power installed with correct voltage and frequency, and a safety earth ground? | ___ | ___ |
| Are temperature and humidity controlled within specifications? | ___ | ___ |
| Is the analyzer installed where it is not exposed to direct sunlight? | ___ | ___ |

Computer System

| | Yes | No |
|---|------------|-----------|
| Was the computer purchased from Micromeritics? | ___ | ___ |
| If No , does the computer meet Micromeritics' minimum requirements? | ___ | ___ |
| Will a Computer Administrator be needed to set up the computer or install software during installation? | ___ | ___ |

If **Yes**, please provide the following:

NAME: _____

PHONE: _____

E-MAIL: _____

Laboratory Equipment and Supplies

| | Yes | No |
|--|------------|-----------|
| Are the required equipment and supplies available? | ___ | ___ |

Hazards and Precautions

Yes **No**

Are there any precautions that Micromeritics employees need to take due to conditions that may be hazardous to Micromeritics employees or equipment?

___ ___

If **Yes**, please explain in detail.

Safety Measures

Yes **No**

Are there any safety measures necessary for Micromeritics employees to enter and install the DVVA II 4000 at your facility?

___ ___

If **Yes**, please explain in detail.

Personnel Security Clearance

Yes **No**

Are there any special arrangements required concerning security clearance?

___ ___

If **Yes**, please explain in detail.

Projected Installation Date

When would installation be most convenient?
(This is not a commitment for a specific installation date.)

Date: ____ / ____ / ____

Commitment Statement/Signature

I have read this document and understand my responsibilities regarding preparations for the installation of our analyzer. I believe this site is ready for the DVVA II 4000 Analyzer to be installed.

SIGNATURE: _____

NAME (Printed): _____

TITLE (Printed): _____

COMPANY: _____

CITY, STATE and ZIP: _____

COUNTRY: _____

PHONE NUMBER: _____

FAX NUMBER: _____

E-MAIL: _____

DATE: _____

ANALYZER MODEL: DVVA II 4000 SERIAL NUMBER _____