

INSTALLATION MANUAL

For EB Series Probe Station



Distribution in the UK & Ireland



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Introduction Notes

We thank you for your support and purchasing a new probe station from Everbeing Int'l Corp. As your new station, please read through this manual for important information regarding installation, operation, warranty and good practice notes. By using the station, it is assumed that the user has read through this manual carefully, and to contact us immediately for any aspects made unclear.

Below you will find relevant contact information:

Contact Information

Please refer to the following depending on how your station was purchased:

For sales inquiries, please contact your local dealer, if the product was purchased from them, otherwise, send your inquiries to sales@probestation.tw if your station was purchased directly.

For technical support, you may contact your local dealer or Everbeing directly.

Everbeing Headquarters Contact Information

Address: No. 1 Jinshan 2nd St.

Hsinchu, 30080

Taiwan

Tel: +886-3-666-2000

Fax: +886-3-666-2200

E-mail: sales@probestation.tw

Warranty Note

One Year Limited Warranty:

This EVERBEING product is warranted to be free from defects in both material and workmanship under proper use post one year starting from the date of delivery. Warranty replacements will only be offered if the product is assessed and deemed to be defective. This warranty does not include cases but is not limited to damage caused by physical accidents, neglectful operation, misuse, and any damage caused from tampering and/or modification by any individual or party that is not represented by EVERBEING or their authorized affiliates and partners. Repairs are to be sent to Taiwan at EVERBEING headquarters for processing. For full listing of proper user and misuse guidelines, please refer to section ____.

30 Day Policy:

Within the first 30 days, should you be dissatisfied upon receipt of this product, you may claim an RMA from EVERBEING. Upon inspection, EVERBEING will issue an exchange for the item.



System Installation Guide

Facility Requirements

The following lists all facility requirements for your probe station to be operational:

Vacuum Chuck:	Flow Rate:	7L/min
	Hose:	3 mm ID x 6 mm OD x 3 m polyurethane
	Note:	(If vacuum pump was purchased, then the facility does not need to prepare this)
Microscope:	Power:	110V 60 Hz Single Phase ¹
		230V 50 Hz Single Phase ²

The following accessories may be included in your system if purchased:

Shielding Box:	Connections:	Customer must supply own electrical connections between outside panel of the box to their instrument
Vibration Free Table:	Air:	100-110 psi Air or Nitrogen
	Hose:	4 mm ID x 6 mm OD x 3 m polyurethane
Vacuum Pump:	Power:	110 V 60 Hz Single Phase ¹
		220 V 50 Hz Single Phase ²
Air Compressor:	Power:	110 V 60 Hz Single Phase ¹
		220 V 50 Hz Single Phase ²

¹ This power requirement is for US, Canada, Taiwan, Japan

² This power requirement is for Europe, Australia, China, South Korea, India, Singapore, and other countries where 220V is standard power



Unpacking the System

Your probe station is crated in a large cardboard container. Inside, you will find the probe station secured to the base of the container. Additional boxes will contain all smaller accessories such as micropositioners and microscopes.

If you purchased a shielding box, it may come in two pieces secured in the same container or a second container. If the shielding box is small enough, your probe station may be secured inside of it.

If you purchased a vibration free table, your probe station and accessories boxes would be secured underneath it. Sometimes the accessories boxes could be secured beside it.

Prior to unpacking the contents from the container, we recommend preparing the sufficient space required for installing the full station.

To unpack:

1. Simply remove the stretch wrap that encloses the contents by cutting with knife or scissors
2. Cut the yellow poly strapping securing the boxes and other contents to the base of the container

All micropositioners are packaged in their own respective boxes with protective foam

Parts List

Probe Station	1x	Micropositioners	4x
Vibration Free Table Frame	1x	Tip Holders	4x
Vibration Free Tabletop	1x	Microscope	1x
Vibration Free Table Guard Rail	2x	Tips	Varies
Shielding Box Front	1x	Microscope Light	1x
Shielding Box Back	1x	Allen Wrench Set	1x
		Shielding Box Connector Panel	1x
		Shielding Box Rear Passthrough Panel	1x
		Shielding Box Feedthrough Cover	4x
		Magnetic Strips	4x
		Light Absorption Fabric	4x

Installation

The following instructions will carry through all procedures required to set your probe station into operational status. Please read carefully as some sections may not apply to you.

Vibration Free Table

If you did not purchase a vibration free table, you may skip this section.

WARNING: The vibration free table is an incredibly heavy product. This section requires a **minimum** of two people to install. Installing with number of people under the minimum could result in serious injury.

We recommend having a **levelling tool** when installing this product.

1. Lift the vibration free table from the frame, and place at designated install space. Refer to the image referencing the front and rear of the table.
2. Verify if the table is placed flat to the floor without any shake
 - a. If table is unevenly placed on floor, turn the screw rod part of the legs at the corners
 - b. Adjust the leg either further out or in to balance along your floor.
 - c. There is a nut along the screw rod, and can be tightened up to the table frame to lock the leg in position
3. Install the two guard rails at the front and rear of the vibration free table.
 - a. Loosen the screw in the guard rail slot
 - b. Set at desired height
 - c. Lock into positioner with the screw

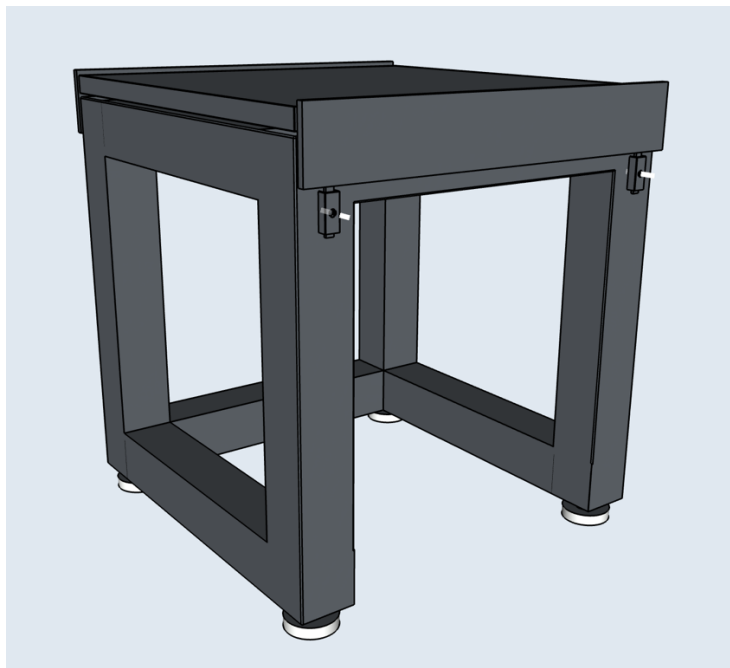


Figure 1. Vibration Free Tabletop (Guard Rail Highlight)

4. Ensure that the tabletop is not is placed evenly on the air cushions, and is not in contact with the guard rails

5. There is a single unconnected pipe from the air regulator underneath the table. Use this to connect to your air compressor source.
6. At this step, move the probe station to the top of the vibration free table.
7. If you have a chamber plus station, or 12" probe station, you may have a pneumatic chuck lift equipped, the air source will need to be split to accommodate this. A splitter is included and located on the pipe itself



Figure 2. Image of the air regulator for pneumatic chuck lift

8. Test the vibration free table by supplying compressed air.
9. The tabletop should be lifted enough that it is not touching the round stoppers. These stoppers are located close to the corners.
10. Level the table to correct flatness using the levellers at the three corners underneath the tabletop
 - a. Adjust the levelers are aligning the planarity using the opposite corners first
 - b. Use the third and last leveler to adjust the second plane and have the tabletop tilt to place.

Microscope Installation

Depending on the type of microscope purchased, the installation will slightly vary.

If your microscope is supplied by Everbeing:

For Stereo Microscopes:

1. Ensure the focus block (secured on the probe station) is securely locked
2. Remove the microscope from the packaging (enclosed in foam)
3. Slide the microscope through the mounting ring on the focus block and tighten with the screw on the ring
4. Install the eyepieces included
5. Install the ring light or coaxial light (model dependent) included, and connect to a power supply
6. Feed power cable through the rear port.

Micropositioners and Tip Holder Assembly

For the EB-005:

1. Unpack the micropositioner from the packaging
2. Unpack the base that came with your positioner
3. Use the 4 included M3 screws to secure to the base of the positioner as shown



Figure 3. Base screw positions for EB-005(same on opposite side)

4. Secure the tip holder bracket to the front of the positioner.
5. With the bracket secure press through the rubber gasket until shown in the image below.

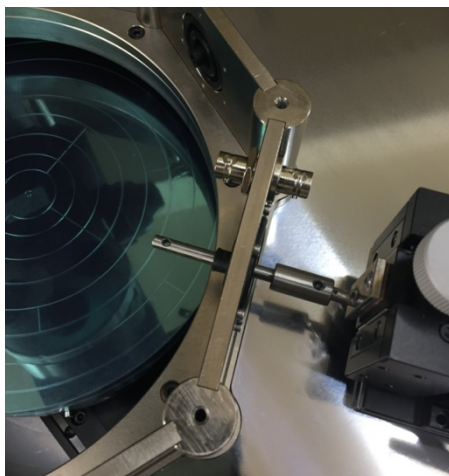


Figure 4. Image of EB-005 installed to ChamberPlus

The remaining steps to install the tips to the tip holder are outlined in the operation manual which is included with your station.

Remarks

Trademark Notes

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**Characterisation,
Measurement &
Analysis**

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