



## INSTALLATION

### **UNPACKING / PACKING**

Immediately inspect the shipping container and packing material for damage. Unpack the EDH-4, taking care not to damage the cushioning materials. Save the shipping container and related materials until normal operation has been established.

#### INVENTORY LIST

Verify that the package contains the parts listed for EDH-4 version ordered.

#### EDH-4

QUANTITY	PART NUMBER	DESCRIPTION
1	18021	EDH-4 Rev A Dehydrator
1	18063	Manual

### ADDITIONAL EQUIPMENT REQUIRED FOR INSTALLATION

The EDH-4 comes equipped standard with a 1/4" hose barbed fitting which accepts 1/4" ID (inside dimension) flexible tubing. Special fittings and tubing can be purchased from ETI: contact Customer Service for details.

### INITIAL INSPECTION

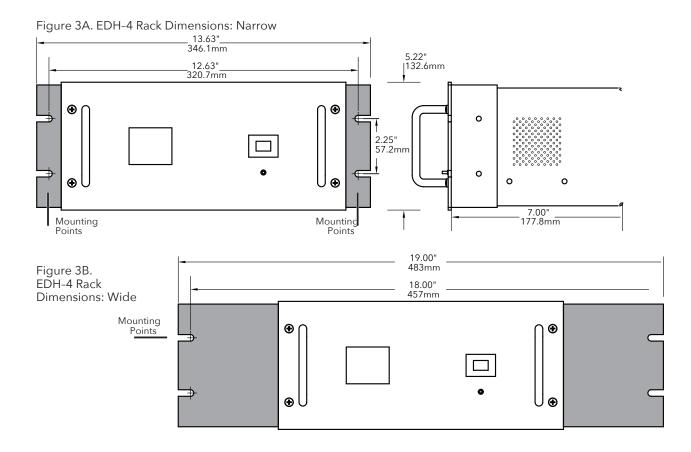
Inspect the EDH-4 for electrical and mechanical damage. Contact the Customer Service Department if you find any of the following:

- Contents incomplete or incorrect per inventory list above
- Internal or external mechanical damage
- Desiccant is white (fully charged with moisture; refer to page 13 for renewal procedure)
- Defective operation; to test effective operation:
  - 1. Attach power to the EDH-4
  - 2. Seal outlet (plug, thumb or kink in hose)
  - 3. Pump stops
  - 4. LED display reads between 30 and 50
  - 5. Remove "seal": LED display reads 0 (zero)
  - 6. Replace "seal": LED display once again reads between 30 and 50

## **MOUNTING**

Install this unit in compliance with National Electrical Code (NEC) and Canadian Electrical Code (CEC) standards, as well as all other local and applicable electrical codes for your area. Prior to beginning installa-tion, make sure that the facility has properly sized electric service and breaker. For additional information re-garding electrical ratings and facility power requirements, refer to the Specifications section of this manual.

The EDH-4 mounting brackets will accommodate fasteners up to 1/4 inch (6.3 mm) in diameter. The choice of anchors and companion hardware should be appropriate for the mounting surface. At least four anchors should be used and each should be capable of supporting a combined load of at least 5 pounds (2.4 kg). The locations of the mounting points are shown in Figure 3A, Narrow, and Figure 3B, Wide.





This unit produces a slight vibration due to oscillating components. This may lead to fatigue and possible failure of the mounting system or wall material. Please consider this when planning your installation.

## PREPARATION AND SYSTEM SET-UP

#### PRINCIPAL CONSIDERATIONS

The EDH-4 works best supplying dry air in a flowing system, where the dehydrator completely replaces the air on a regular basis. Consequently, the equipment being supplied dry air should be slightly leaky: that is, continual airflow is achieved when dry air pressure from the EDH-4 is greater than the air pressure of the environment the unit maintains. For a waveguide, this is best accomplished by slightly opening a purge valve at the window end of the system. Likewise, air dielectric coaxial cable should be equipped with a valve at the end opposite to where the EDH-4 pumps air, which can be set to allow a small leak. Many systems will have sufficient normal leakage that such actions will be unnecessary.

The EDH-4 also has a check valve in its air path. A tightly sealed system may experience a pressure increase, such as from solar gain, with a rise in ambient temperature. The EDH-4 has no way to reduce pressure buildup. A pressure relief valve rated to protect the feed horn window is recommended to account for this buildup.

### **POWER CONNECTION**

The EDH-4 uses a universal (100 VAC to 240 VAC at 50/60 Hz) power supply. This eliminates the need to set voltage during the installation or having to purchase different units for different power requirements.

The EDH-4 requires a standard outlet (North America: NEMA 5-15R) no further than 6 feet (1.8 m) from the power entry point at the back of the unit. Consider a readily accessible disconnect device and a short circuit and overcurrent device rated 20 amps maximum. The EDH-4 does not incorporate a power switch: the unit will be energized as soon as power is connected to the unit. The power cord contains a ground lead.

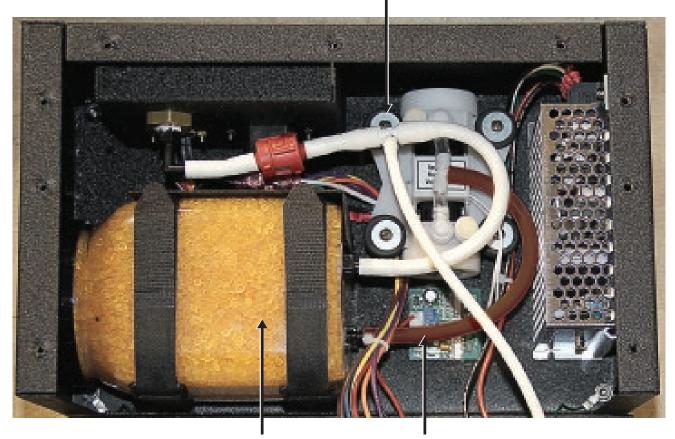
### PNEUMATIC CONNECTION

The EDH-4 is supplied with a 1/4" (6.4 mm) barbed male fitting. Slip the supply tubing over the outlet barb engaging all the ridges. The fit should be tight enough that a clamp or cable tie is not required although its use is recommended. Special accessories are available from Customer Service, including: distribution manifolds and a variety of pressure fittings and tubing types.

## FIGURE 5.

EDH-4 pneumatic connections

Tubing-T Assembly



Final Bottle Assembly Tube Assembly