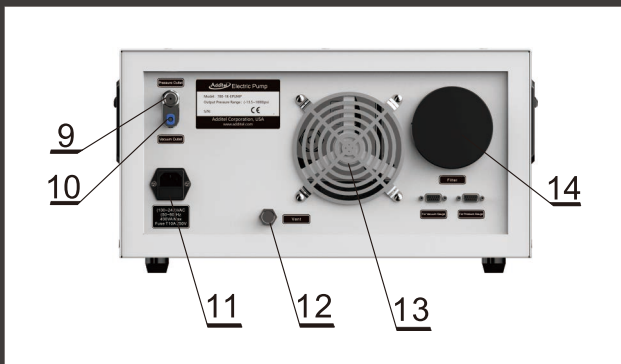
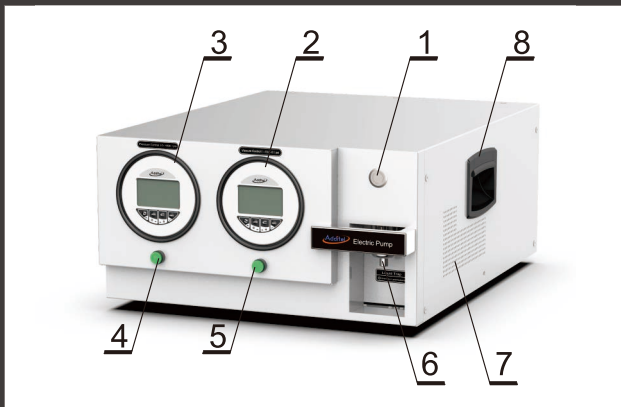


## Safety Information & Cautions

- > Since this product can produce high pressure air, it must be operated by professionals.
- > Please read this manual carefully before using this product to avoid personal injury and damage to the instrument during use.
- > Before use, ensure outlet connections are secured tightly.
- > Before making any connections or changing the gas pipelines, ensure the unit is vented.
- > When the product is working, it is strictly forbidden to stand in front of the vent port to avoid injury.
- > Keep good ventilation when using, and check the vents and fans regularly.
- > Avoid using in dusty, wet, flammable, and explosive environments.
- > Do not put the device under direct sunlight for a long time.
- > For non-professionals, it is prohibited to open the case.

## Configuration



1. Power on-off
2. Vacuum control gauge
3. Pressure control gauge
4. Pressure control switch
5. Vacuum control switch
6. Liquid collector (To collect and filter contaminants; Open the bottom screw to drain out contaminants)
7. Heat dissipation holes
8. Handle
9. Pressure outlet port (1/8" BSP female)
10. Vacuum outlet port (1/8" BSP female)
11. Power socket
12. Drainage port (The gas and a small amount of liquid in the internal gas storage can be drained here after power off, and a hose can be inserted for collection)
13. Cooling fan
14. Air filter (Make pressure control when air inletting) (need to change periodically)

## Overview

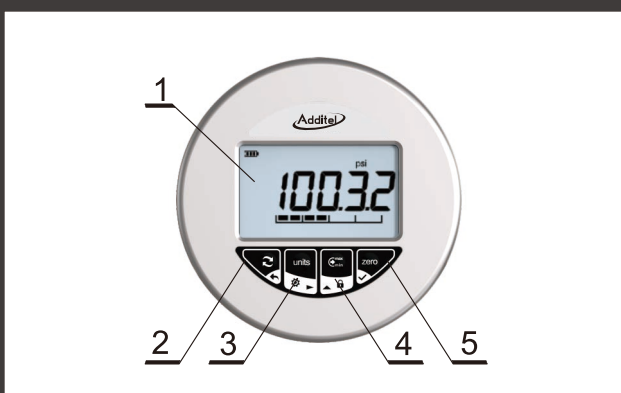
ADT780-1K-EPUMP air pressure source uses electric driven pumps to generate positive pressure and vacuum pressure. It can generate -13.8 psi (-0.095MPa, -0.95 bar) vacuum and 1,000 psi (7MPa, 70 bar) pressure. With two independent control and pressure generation systems, vacuum and pressure can run simultaneously. This system supplies a steady and reliable air source for Additel 780 pressure controller.

## Specification

- > **Pressure range:**  
Vacuum: -13.8psi to 0psi, @ the local atmosphere is 14.5psi.  
Pressure: 0 ~ 1000psi
- > **Positive pressure source:** Pressure will be generated when the current pressure is below the lower limit of set pressure, and will stop automatically when the current pressure is above the upper limit of set pressure.
- > **Vacuum source:** Vacuum will be generated when the current pressure is above the upper limit of set pressure, and will stop automatically when the current pressure is below the lower limit of set pressure.
- > **Media:** Air
- > **Suction flow:** 9L/min
- > **Power supply:** AC220V±10%; 50Hz±1Hz; 400VA Max
- > **Dimensions:** 21.7" X 17.3" X 9.3" LWH (550 X 440 X 235 mm)
- > **Weight:** 69.7 lbs (31.6 kg)



## Pressure set panel



1. Display
2. Control/Return button
3. Pressure units / Right button
4. Switch / Up button
5. Zeroing/ Confirm button

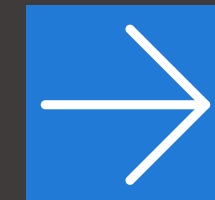
Figure 1-1 Pressure/vacuum meter's panel

### Remark:

- A: Additel has made a concerted effort to provide complete and current information for the proper use of the equipment. The product specifications and other information contained this manual are subject to change without notice.
- B: Above pictures are just for reference.

Additel Corporation, USA  
www.additel.com

**Additel** 780-1K-EPUMP  
Electric Pump User Manual  
[Version No.: 2112V04]



## Operation


### 1 Preparation

- Connect its air pipes, electrical cables with other devices. Check the vent port, fan and filter to ensure security.
- Check and empty the liquid collector prior to use. Make sure the collector is dried.
- When pressure beyond the high limit, the EPUMP may vent with noise. Its safety valve is programmed to prevent the EPUMP from over pressuring. It is normal.

### 2 Pressure setting





Power on the power switch(1) and the display will illuminate. (Power on the power switch and pressure control switch, the display will be illuminated. )

#### 2.1 Selecting the pressure unit




Press the  button shortly to select the desired pressure unit between “psi”, “bar”, “MPa” and “kgf/cm2”, the correspond unit will be shown up.

#### 2.2 Set the lower/upper limit

Refer the figure 1-1.

- Shortly press  button. Then there will be MIN, MAX and present value in order.
- When displaying MIN or MAX, shortly press  to modify the set pressure value, the left digit will flash. The flashing digit can now be set.
- Shortly press  button, each digit of the value can be set in loop.
- Shortly press  button, the current set value will be increased in loop.

## Operation


- Press and hold  button to switch between + and -. (used for setting the vacuum)
- After the upper or lower limit value have been set, shortly press  button to save the value. Shortly press  button to discard.
- Now the upper and lower limit value have been set, the unit can now control the pressure according to the set value.

**Note: The lower limit value must be less than upper limit value. When the range of the pressure during operation is below the stored pressure, power off the device and it will vent automatically.**

### 3 Vacuum setting

Power on the unit and open the vacuum control switch at the same time, then display will illuminate and it is powered on.



#### 3.1 Selecting the vacuum unit

Push the  button shortly to select the desired pressure unit between “psi”, “bar”, “MPa” and “kgf/cm2”, the correspond unit will be shown up.

#### 3.2 Set the lower/upper limit



Same as paragraph.2.2.

### 4 Lock/unlock the key


Press and hold the  button for 3 seconds to enter lock mode. The LED displays “lock”. This means all display buttons locked. Press and hold the  button for 3 seconds to unlock the display, the “lock” will disappear. This means the display can be operated as usual.

## Operation

### 5. Start / pause

Press and hold  button to pause/ start the output control, when LED displays  , it means the pressure is being controlled. Without this display, the pressure is not under controlled.

### 6. Pressure zero

When the pressure gauge is vented to atmosphere, if there is significant error in measured value, shortly press  button and zero the value, so as to ensure the measured value is close enough to zero.

## Maintenance

### 1. Filter replacement

Over time and use, the air filter will need to be replaced. The recommended interval to replace the air filter is yearly. Unscrew the air filter cover counterclockwise (see figure 1-1). Remove the filter and replace it with a new one.(see figure 1-2)

### 2. Emptying the liquid collector

It is possible for some liquid to gather in the liquid collector. When liquid is present, it should be drained before use. If not, there is some potential for the liquid to damage the vacuum pump.

A. Remove the vacuum hose on the back panel of the EPUMP.

B. Put a container under the liquid collector. Unscrew the cap to the liquid collector by turning it counterclockwise (see figure 1-3).

## Maintenance

C. After all of the liquid drains out screw back on the liquid collector cap(see figure 1-4)

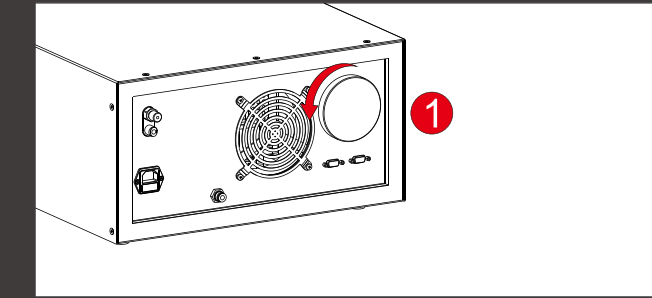


Figure 1-1

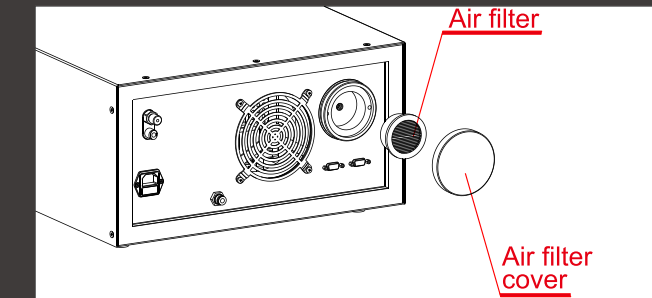


Figure 1-2

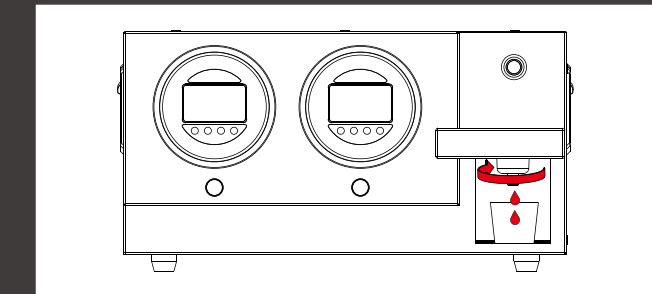


Figure 1-3

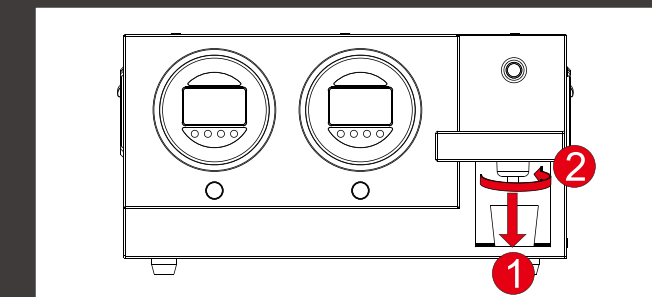


Figure 1-4