

## Product Warranty

**Virtual Industries, Inc.**  
PRODUCT WARRANTY  
LIMITED 90 DAY WARRANTY

Above named company warrants to the original consumer purchaser that this product shall be free from defects in material and workmanship for a period of 90 days from the date of purchase. If a defect covered by this warranty occurs during the 90 day warranty period, return the unit to above named company for repair or replacement of the unit, at the option of the above named company. For the correct address and return authorization call:

**1-800-530-8377 or (719) 572-5566**

This warranty does not cover damage or malfunctions resulting from improper handling, accident, misuse, abuse, failure of electrical power, use with other products not manufactured by the above named company, damage while in transit for repairs, repairs attempted by any unauthorized person or agency, or any other reason not due to defects in materials or workmanship. This warranty is also void if the serial number has been altered, defaced or removed.

### UNIT SERIAL NUMBER \_\_\_\_\_

THE ABOVE WARRANTIES FOR GOODS ARE IN LIEU OF ALL WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ABOVE NAMED COMPANIES LIABILITY IS LIMITED SOLELY TO THE REPAIR OR REPLACEMENT OF THE UNIT IN ITS SOLE DISCRETION, AND IN NO EVENT SHALL INCLUDE CONSEQUENTIAL COSTS, EXPENSES OR DAMAGES INCURRED BY THE PURCHASER, INCLUDING WITHOUT LIMITATION ANY DAMAGE TO PRODUCTS BEING HANDLED, EVEN IF THE ABOVE NAMED COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

THE ABOVE NAMED COMPANY shall have no obligation to enhance or update any unit once manufactured.

Some states do not allow limitations on how long any implied warranty lasts so the above limitations may not apply to you. Some states do not allow the exclusion or limitation or incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

**Virtual Industries, Inc.**  
2130 Victor Place  
Colorado Springs, CO 80915  
U.S.A.



9/26/08

## OPERATING INSTRUCTIONS AND SPECIFICATIONS

### TV-100 Tweezer-Vac® System - Non ESD Safe

Model No. TV-100

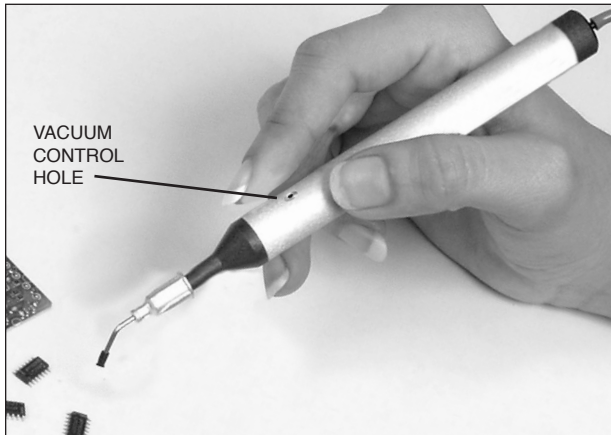


## Operation of the TV-100

1. Connect the vacuum hose to the vacuum fitting on the front of the TV-100. Make sure the hose is pushed all of the way on. Connect the other end of the vacuum hose to the rear of the vacuum handle, again make sure the hose is pushed all the way on.



2. Select a probe with a vacuum cup that is slightly smaller in diameter to the outline of the parts that you want to pick and place. Securely install it on the tapered end of the vacuum handle. Selecting a vacuum cup that is too large or too small will result in improper operation.



3. Connect the TV-100 power cord to input power. Turn the power cord ON/OFF switch to the on position.
4. To pick and place a part:
  - a. Gently place the vacuum cup on top of the part that you wish to pick up, place your finger over the control hole. The part should now be firmly grasped by the vacuum cup.
  - b. Now move the part to where you want it.
  - c. To release the part simply remove your finger off the control hole, the part should now be released.
5. Remember to turn the unit off when you are finished.

## Specifications

**NON-ESD SAFE:**  
TWO WIRE CORD  
ELECTRICALLY CONDUCTIVE VACUUM CUPS  
STATIC DISSIPATIVE RUBBER HOSE  
STATIC DISSIPATIVE PLASTIC NOZZLE

**VACUUM:**  
MINIMUM 6 INCHES OF MERCURY AT SEA LEVEL.

**DIMENSIONS:**

LENGTH	HEIGHT	WIDTH
4.25" (108mm)	2.38" (60mm)	2.5" (64mm)

**WEIGHT:**  
1.24 LBS. (463 GRAMS)

**POWER REQUIREMENTS:**  
MODEL # TV-100                                 110 VOLTS A.C. 50/60 HERTZ         8 WATTS

### TV-100 OPTIONS

**VACUUM INTERRUPTER P/N V3025**  
Facilitates precision placement of small parts. The hand that holds the wand is used to position and/or rotate the part being placed while the other hand makes or breaks the vacuum by covering or uncovering the control hole on the interrupter block.

**SELECTION OF VACUUM CUPS WITH PROBES**  
The vacuum cups are a soft rubber material that allow handling a wide variety of small parts.

**SELECTION OF MINIATURE VACUUM TIPS**  
These tips are designed to handle tiny parts as small as 0.01" (0.25mm).

For technical assistance call toll free 1-800-590-2829  
Tele: 719-572-5566  
Fax: 719-572-5504  
8:00 A.M. to 4:30 P.M. Mountain Standard Time