

INSTRUCTIONS

FOR



AREA CALCULATOR

martin-kuykendall inc.

albuq., n.m. 87110

ASSEMBLING INSTRUCTIONS

- 1 Insert pencil wire into either socket on front of counter case.
- 2 Insert grid wire into other socket on front of counter case.
- 3 Insert short wire permanently attached to grid to other end of grid wire.
- 4 Plug line cord into power source. (CAUTION: Use of power source with voltage other than designated on name plate can cause inaccurate readings and may damage counter).
- 5 Place panel switch ON and MK Area Calculator System is ready to operate.

OPERATING INSTRUCTIONS

pencil

Adjust the length of the lead by grasping the spring toward the top end of the pencil and pushing. This releases the lead from the chuck. It is not necessary to remove the spring connection from the end of the pencil.

Never use pencil lead harder than grade 5B. Use of harder lead may damage grid.

operating

- 1 See figure 1 to become familiar with terms used in these Instructions. Read complete instructions before you begin.
- 2 Place the transparent grid on the area to be measured, with grid connecting wire at the top.

- 3 Tape grid down to hold it firmly in place over area being measured.
- 4 Place pencil point on grid over the upper left corner of area to be measured. (See point A, Figure 1.)
- 5 Zero the counter by depressing the reset lever.
- 6 Draw the pencil to the right, directly over the red guide line. Each time you cross a vertical line, the counter will advance one number. When the pencil reaches the right boundary of the area being measured, lift the pencil from the grid and begin again at the right end of the next lower guide line, and repeat the process from right to left. Continue these traverses until the entire area being measured is covered.
- 7 Reading on the counter is area measured. See Handbook of Scales & Equivalents for conversion factors for different grids and different map scales.

NOTES

- A. The MK Area Calculator System uses a low voltage current thru the grid printed circuit. While it is safe to the operator at all times, the operator may occasionally feel a slight tingle in the fingertips. This may be avoided by grasping the plastic portion of the pencil rather than the metal tip.
- B. When tape is used to hold grid in place, be sure to keep tape from touching any conducting lines.
- C. If the pencil is moved across the grid too rapidly, the counter will not total accurately.
- D. It is not necessary to bear down on the pencil. Use just enough pressure to leave an easily seen pencil line.

counter care

Counter needs no maintenance. Do not oil.

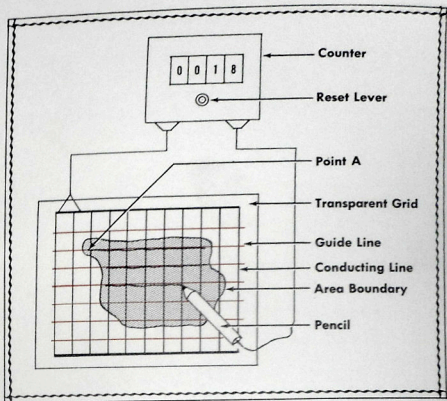


Figure 1

grid care

Handle grid with care. Never roll or fold grid. Store grid on a flat surface, in a cool, dry place.

To clean pencil marks from grid, wipe gently with cotton, or a soft cloth, moistened with grid cleaner, parallel to conducting lines. Dry with dry piece of cotton or dry, soft cloth. Do not scrub.

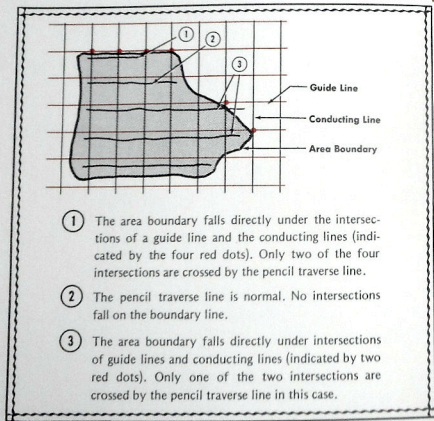
CAUTION

Keep underside of grid from contact with grid cleaner. It may remove guide lines.

Use the grid patching ink to repair minor damage to grid conducting lines. Ink can be drawn on damaged line using a bow ruling pen. Let ink dry for 20 minutes before using grid.

SPECIAL CONDITIONS

There will be times when the operator cannot tell whether a conducting line falls inside or outside the boundary of the area being measured. To make decisions easier, and measurements more accurate, it is best for the operator to draw the pencil directly over the guide line rather than between two of the guide lines. (In figures 1 and 2 the pencil line is drawn slightly below the guide line only for diagram clarity). If the intersection of the guide line and the conducting line falls inside the boundary line, the pencil should touch (contact) that conducting line which forms the intersection. If two or more of the intersections fall directly on the boundary line, only half of the intersections should be counted (see figure 2).



summary

Figure 2

When two or more intersections, on any area being measured, fall directly on the border of the area being measured, only half of these intersections are crossed by the pencil traverse lines.

LIMITED WARRANTY

Martin-Kuykendall Inc., warrants MK Area Calculators free from defects in materials and workmanship.

Our obligation under this warranty is limited to furnishing F.O.B. factory, any part or parts thereof which shall, within three months from date of shipment from our factory, distributor, or retailer, be returned to our factory with all transportation charges prepaid and which our examination shall disclose to have been defective. The MK Area Calculator must not be returned except by permission of this company or its distributor.

This warranty does not apply to any equipment which shall have been repaired or altered outside of factory in such a way as, in our judgement, to affect its stability, or which has been subject to misuse or negligence.

This warranty does not cover any labor charges for replacement of any part or parts, adjustments, repairs, or any work whatsoever done outside of factory.