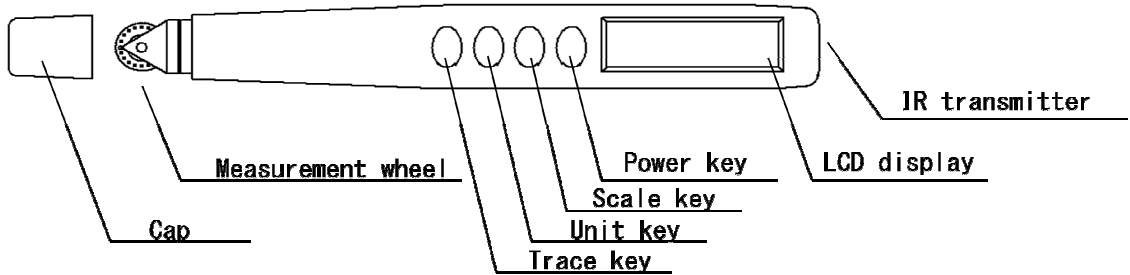


# HOW TO USE PENTYPE MAP-METER CV-10

## A Quick and Easy Guide!

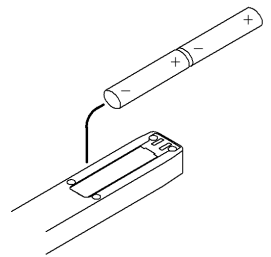
### 1. DESCRIPTION of PARTS



### 2. REPLACE THE BATTERIES

When a display becomes light and difficult to see, it means attrition of the batteries. Replace the batteries by following procedure.

- Open the battery cover.
- Replace the batteries. (Pole is instructed inside of the battery case.)
- Put back the battery cover.

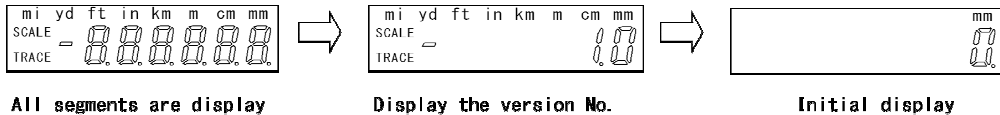


### 3. POWER ON

Press the Power key to turn on the Map-meter CV-10.

#### **FUNCTION ALL-CLEAR**

Keep pressing the Unit key while first turning the CV-10 on. LCD shows following display and remove into initial settings such as Scale : 1/1, Unit : mm.



#### **ENABLE ENGLISH UNIT SYSTEM**

Keep pressing the Scale key while first turning the CV-10 on. The English unit systems, in, ft, yd, mi, will be enabled.

### 4. UNIT SETTING MODE

- Select the desired measuring unit by pressing the Unit key. The unit setting will automatically change if the distance measured exceeds the six digit capacity of the CV-10.
- The unit setting may be changed manually while measuring by pressing the Unit key. This will change the number into a different unit setting. For example, 8000m can be changed to 8km.

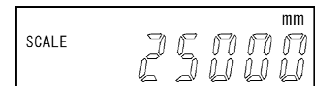
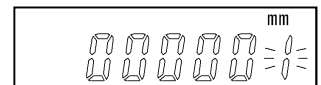
Note. This function can also be used in the HOLD Mode. (see 7. HOLD MODE)

### 5. SCALE SETTING MODE

- Press and hold until LCD shows scale value as shown in right.
- To change this flickering digit, press the trace key until you have reached the desired number. (The number runs from 0 to 9)
- Press the Unit key again to make the next digit flicker. Use the Trace key to change this number. Repeat this process to change the other digits as desired.
- After setting all six digits, press the Scale key. All numbers will stop blinking and all unnecessary numbers will disappear. The Scale factor is now set. Setup Scale is shown on LCD momentarily and go back to initial display.

- Note:
- If you set zero, the scale value automatically setup 1 (1/1).
  - "SCALE" indicator will appear if you set the Scale value except for 1 (1/1).

- After turning the CV-10 off, this setting will be retained until a new scale setting is selected.



Scale : 1/25000



Initial display

## 6. TRACING MODE

- Press the trace key to begin measuring at the current setting. "TRACE" indicator will appear when the CV-10 is in the Tracing Mode.
- Trace the measuring wheel along the desired course. The distance measured is displayed on the LCD.

Note: If you trace the measuring wheel forward or backward, the measured distance will move in a positive direction. To subtract a measured distance, press and hold the Scale key; then move the CV-10 in desired direction.

- Traced line exceed actual 10m, beep the buzzer and displayed value on LCD will not change.

## 7. HOLD MODE

- After completing a measurement, this number may be held by pressing the Trace key. The displayed number will not change after this, even if the measuring wheel turns. The Unit Setting, however, can be changed by pressing the Unit key. ( see 4. UNIT SETTING MODE )
- If the Trace key is pressed once, the display will revert to zero (0). Measuring can begin anew, but you cannot continue the old measurement.

## 8. POWER OFF

- Press the Power key to turn the power off.

### ***FUNCTION AUTO POWER-OFF***

- If there has been no new input, the automatic power-off function is activated after about eight (8) minutes. Press the Power key to restart the CV-10. It will be reset to zero (0) and the previous number will not be retained.
- If the Power key is pressed during measuring, the display turns off. Press the Power key again and the CV-10 again will be reset to zero (0).

## 9. FUNCTION INFRA-RED (IR) TRANSMISSION

CV-10 can transfer the measured data to PC by using receiver unit (optional).

- After completing a measurement, press the Trace key. Measured distance will transfer to PC through IR ray. Please aim at receiver unit with this CV-10 when you transmit the data to PC.
- In case of transmission is failure, please re-send the same data to PC by pressing Scale key.

## 10. SPECIFICATION

Display	:	LCD, 6-digit Figures · 10 Symbols
Applicable unit	:	mi, yd, ft, in, km, m, cm, mm
Sensor	:	Photointerrupter
Measuring range	:	10m ( actual measurement )
Resolution	:	1mm
Accuracy	:	Within $\pm 0.3$ %
Power source	:	AAA $\times$ 2 Continuous operating life : Approx 120 hrs. * Operating life depends on your usage.
Operating temperature	:	0 $\sim$ 40 $^{\circ}$ C
Storage temperature	:	-20 $\sim$ 60 $^{\circ}$ C
Weight	:	Approx 65g ( including battery)
Dimensions	:	170 $\times$ 22 $\times$ 23mm ( including wheel cap )
Measuring wheel	:	Material : PPS plastic Diameter : 12.7mm

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