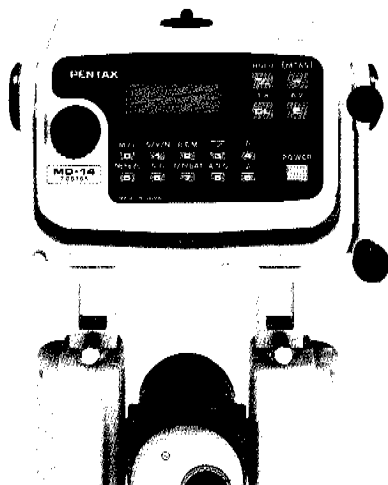
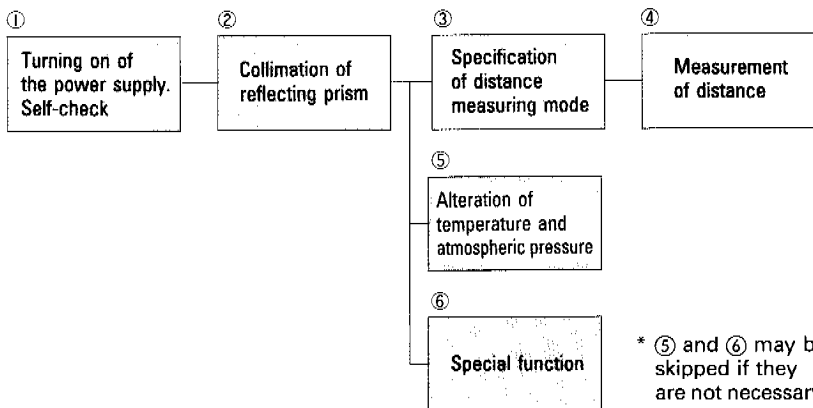


# PENTAX

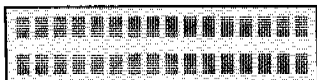
## Electronic Distance Meter MD series

### «Operational procedures»



## 1. Turning on the power supply

Set the power switch on keyboard to ON.



All the segments light.



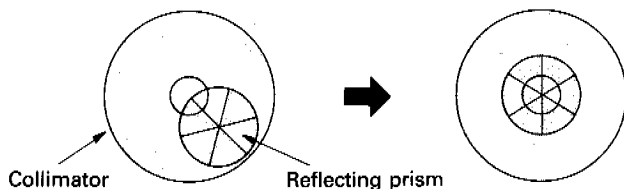
During self-check.



No internal abnormality.

## 2. Collimation of reflecting prism

- 1) Loosen the MD vertical clamp screw and horizontal clamp screw of theodolite, and turn MD in the direction of the reflecting prism.
- 2) Collimate the center of the reflecting prism with the collimator



### 3. Specification of distance measuring mode

Press the key for the distance measuring mode to specify mode.



Fine measurement of distance.....Distance is measured repeatedly every five seconds in millimeter units.



Measurement of average value.....Average value for five or three time measurement is displayed.



Tracking measurement of distance.....Distance is measured repeatedly every one second in centimeter units.



Hold function.....When distance is measured by MEAS, AV, and TR, this function stops the automatic light volume adjusting function when the light volume does not stay stable.



Conversion function.....Slope distance/horizontal distance, vertical distance/Difference in height, N coordinate/E coordinate are selected in order.

## 4. Measurement of distance

Distance is measured by specifying the distance measuring mode in accordance with objective and accuracy of measurement.

- 1) Press the  key.

-SLP 25 -  
-HOR -



\*SLP 45 -  
\*HOR -



\*SLP 1261.631M□  
\*HOR 1120.201M\_

When the center of the reflecting prism is collimated with the collimator, the buzzer sounds, and the numerical value of two digits which expresses the light volume is displayed on the top right. Soon the numerical value stops, and the \* mark is displayed. In several seconds, the measured value is displayed.

← Slope distance value

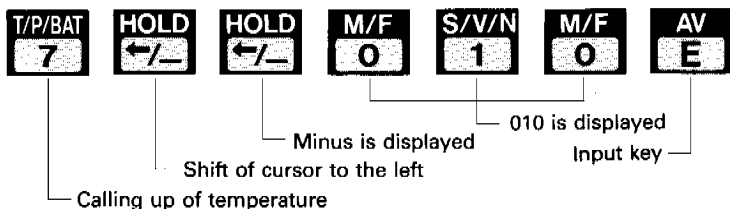
← Horizontal distance value

- Horizontal distance is displayed only when the vertical angle is input.

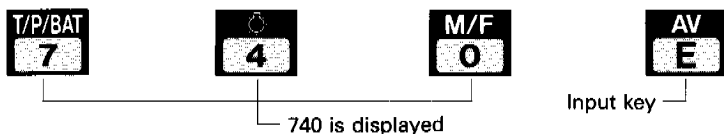
## 5. Alteration of temperature and atmospheric pressure

If necessary, it is possible to input new numerical values of temperature and atmospheric pressure according to the following procedures.

### 1) Inputting of temperature (example of inputting $-10^{\circ}\text{C}$ )



### 2) Input of atmospheric pressure (input example of 740mmHg) Atmospheric pressure is input after temperature is input.



Atmospheric compensation factor (ppm) which is calculated based on the set temperature and atmospheric pressure is displayed.

### 3) After confirming alteration of temperature and atmospheric pressure, press the **AV** (E) key to complete the operation.

## 6. Role of each key



Used for fine measurement of distance. Unit: mm  
(In the case of +, this key is used to shift the cursor to the right.)



This key stops the automatic light quantity adjusting function when distance is measured by MEAS, AV, and TR and the quantity of light is unstable.  
(In the case of +, this is used when shifting the cursor to the left, and in the case where a numerical value such as temperature is input, this is used to input the minus code.)



Used when tracking distance is measured. Unit: cm  
(In the case of +?, this is used to clear the numerical value.)



Used to obtain the average value of the measured distance (or five time measurement). Unit: mm  
(In the case of +?, this is used to input temperature, atmospheric pressure, set distance, and machine coordinate value.)



This key is used to convert the measured distance between meters and feet. Every time this key is pressed, distance is converted alternately.  
("0" of ten-key)



This is the display mode selection key. At first, this is used to switch between slope distance (SLP) and horizontal distance (HOR), and then to switch between vertical distance (VER) and hypsometric point (Z), and then to switch between N coordinate and E coordinate.  
("1" of ten-key)



Used to measure remote distance and altitude.  
("2" of ten-key)



Used to measure distance between points.  
("3" of ten-key)



Used to light display (LCD).  
("4" of ten-key)



Used to input the machine coordinate (No, Eo, Zo) or call up input coordinate value for the purpose of confirmation.  
("5" of ten-key)



Used to input the set distance or call up input set distance for the purpose of confirmation. (Stake-out measurement)  
("6" of ten-key)



Used to call up input temperature and atmospheric pressure for the purpose of change or confirmation and to confirm residual amount of battery.  
("7" of ten-key)



Used to call up input vertical angle or horizontal angle for the purpose of change or confirmation. The ANG does not operate when the angle is automatically input from TH-E10C/E10D.  
("8" of ten-key)



Used to stop buzzer for receiving light when MEAS and TR measurement is done.  
("9" of ten-key)

# PENTAX

ASAHI PRECISION CO., LTD.

1-1-21, Shirako, Wako-Shi,  
Saitama-ken, 351-01, Japan