Code		Size
Sensitivity: 0.02mm/m(=0.001°)	Sensitivity: 0.05mm/m(=0.0029°)	
4902-150	4902-C150	150x150mm
4902-200	4902-C200	200x200mm
4902-300	4902-C300	300x300mm

1-V-groove
2-Main bubble
3-Adjust screw
4-Transverse vial
5-Adjusting wrench

1. The level and workpiece must be at the same temperature for at least 3 hours.
2. Set zero
   a) Slide (not put) the level on a clean, plane and smooth surface. '-' side is on the left and '+' side is on the right (Fig.1).
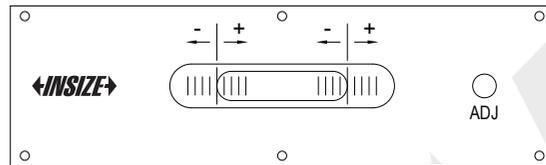

Fig.1

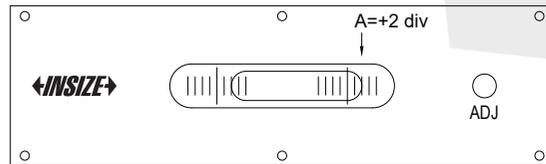b) After the bubble stops moving, read A on the scale (Fig.2).

A=+2 div

Fig.2

c) Turn the level 180°, slide (not put) the level at the same position of the surface (Fig.3).
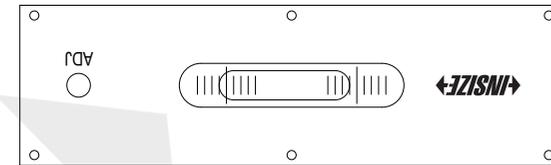

Fig.3

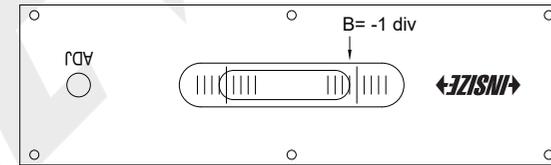d) After the bubble stops moving, read B on the scale (Fig.4).

B= -1 div

Fig.4

e) If A-B≤1/2 div, the level can be used. If A-B＞1/2 div (in the above example, A-B=3 div), rotate the adjust screw lightly until the bubble moves to the middle between A and B (Fig.5).
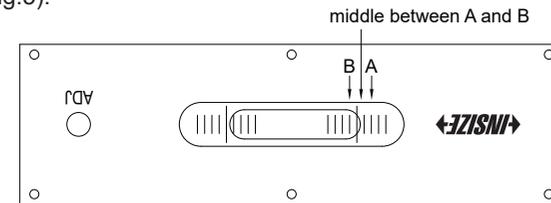

middle between A and B

B A

Fig.5

Please note: rotate the screw clockwise to move the bubble to the right side (Fig.6), rotate the screw counterclockwise to move the bubble to the left side.
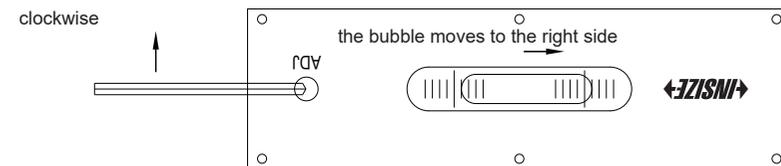

clockwise

the bubble moves to the right side

Fig.6

MN-4902-E

V1

3. Measuring
   a) Slide (not put) the level on the surface of workpiece.
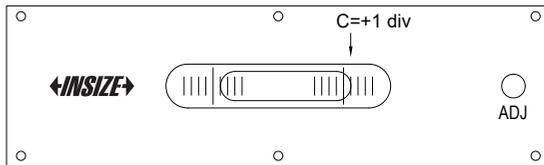   b) After the bubble stops moving, read C on the scale (Fig.7).

Fig.7

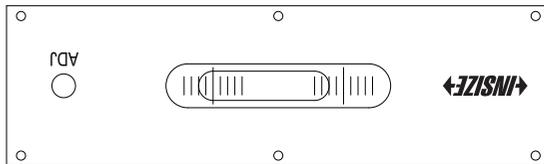c) Turn the level 180°, slide the level at the same position of the surface (Fig.8).

Fig.8

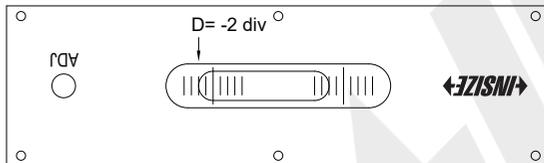d) After the bubble stops moving, read D on the scale (Fig.9).

Fig.9

e) The reading should be (C+D)/2.
In the above example: C=+1, D= -2, (C+D)/2= -1/2div.
For sensitivity of 0.02mm/m, the result is: -1/2x0.02mm/m=-0.01mm/m
For sensitivity of 0.05mm/m, the result is: -1/2x0.05mm/m=-0.025mm/m