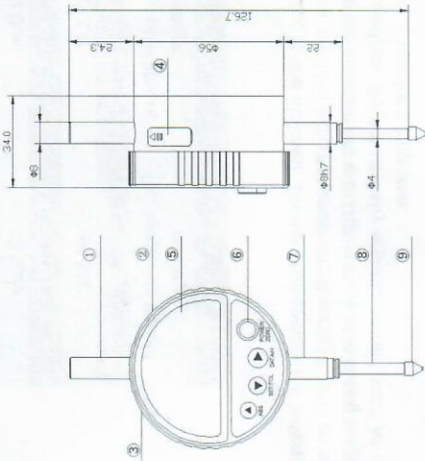


### 1. Schematic



### 2. LCD display



- ⏻ : Measuring direction
- ⏻ : Data output
- ⏻ : Battery voltage
- ⏻ : Upper tolerance limit
- ⏻ : Lower tolerance limit
- ABS : Absolute mode
- TOL : Tolerance mode
- H : Data holding
- in : Inch unit
- mm : mm unit
- Max : Max mode
- Min : Min mode
- Max-Min : Max-Min mode

### 3. Buttons and operations

There are two ways to press buttons: short press (<1s); long press (≥2s)

#### 3.1 Power / Zero

- : Reset Zero.
- : Switch on / off.

#### 3.2 ABS

- : Enter / quit ABS mode (Preset function).
- : Input a preset value.

#### 3.3 Set / TOL

- : Enter / quit TOL mode.
- : Set tolerance limits / reset MIN/MAX mode / select units.

#### 3.4 Data / H

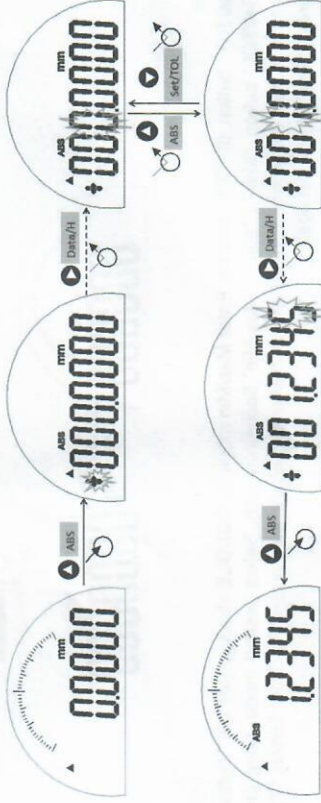
- : Output the data to pc and "" flashes once. Output data continuously by long pressing the buttons of "Set/TOL" and "Data/H" simultaneously, "" keeps flashing. Quit this mode by short pressing "Data/H" button.
- : Hold measuring data and "H" displays.

### 3.5 Measuring direction

Change +/- of the downward movement of the contact point by long pressing the buttons of "ABS" and "Set/TOL" simultaneously, with the sign of "" or "" displays.

### 4. Input (or modify) a preset data

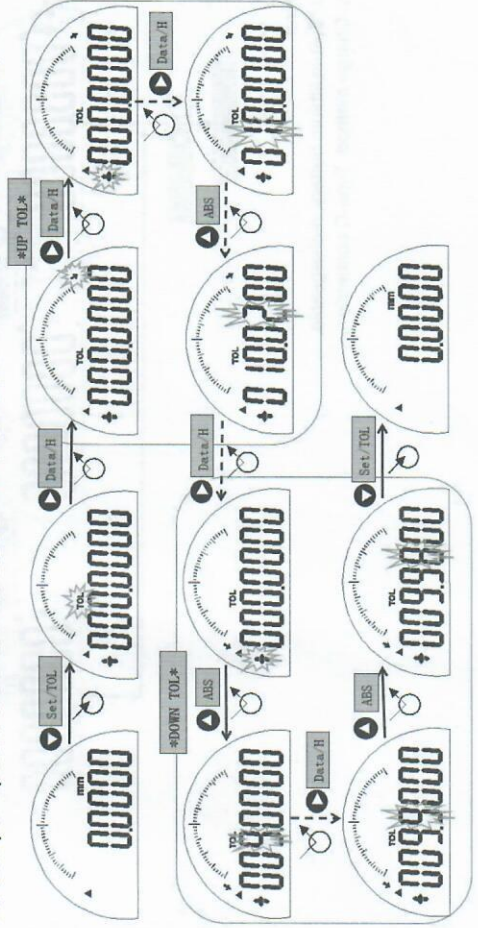
- a. Long press "ABS" button, till "" / "" flashes. Choose "" or "" by a short pressing on "ABS" or "Set/TOL" button.
- b. Select digits by short pressing "Data/H" button. Increase / decrease the value by "" or "".
- c. Long press "ABS" button again to **save & quit**, the displayed data will be stored as a preset data. For example: Input a preset data of 1.2345 mm



### 5.1 Input (or modify) tolerance limits

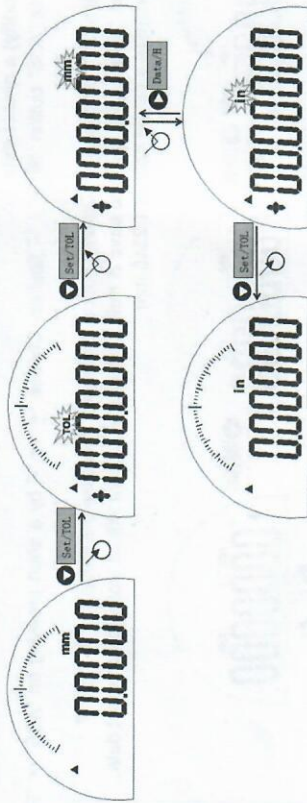
- a. Long press "Set/TOL" button, till "TOL" flashes. Short press "Data/H" button, to set upper tolerance limit.
- b. Short press "Data/H" button, "+" flashes. Set to "+"/ "-" by a short pressing on button "ABS" or "Set/TOL". Short press "Data/H" button again to select desired digit, increase / decrease the data by "" or "".
- c. Short press "Data/H" to save upper tolerance limit. When "" disappears and "" displays, start to input lower tolerance limit by repeating the steps of "b".
- d. Long press "Set/TOL" button to **save & quit** the mode. (The simulated scale shows only the dynamic measuring direction when quit TOL mode.)

Notice: ① Upper limit > Lower limit. ② In normal mode, TOL must be a certain Max/Min values. For example: Input the tolerance limits  $10 \pm 0.02$ mm (Max values: 10.02mm, Min values: 9.98mm)



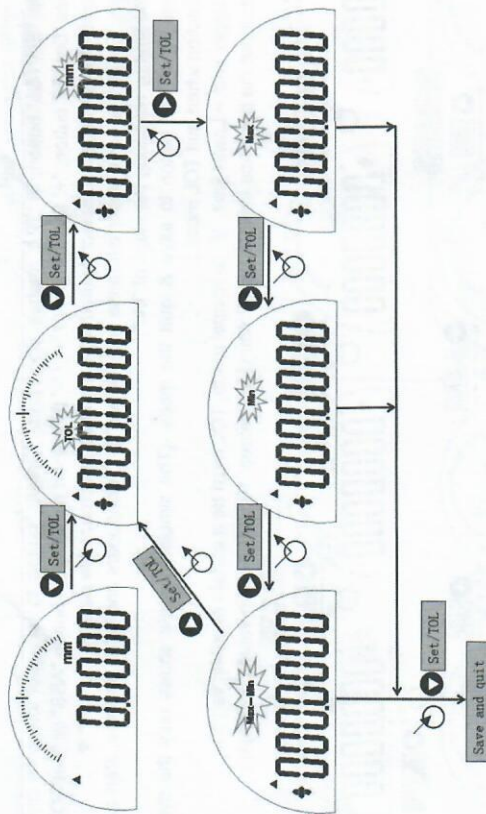
### 5.2 Select mm/inch

- Long press "Set/TOL" button, till "TOL" flashes. Enter mm / inch mode by a short pressing on "Set/TOL" button.
- Short press "Data/H" button, "mm" or "in" flashes. Switch mm / inch by a short pressing on "Set/TOL" button. Long press "Set/TOL" button to **save & quit** the mode.



### 5.3 Max / Min mode

- Long press "Set/TOL" button, till "TOL" flashes. Enter Max/Min mode by **DOUBLE** clicking "Set/TOL" button.
- Short press "Set/TOL" button, "Max" / "Min" / "Max-Min" flashes by turn. Select desired mode. Long press "Set/TOL" button to **save & quit** the mode. ( To quit Max/Min/Max-Min mode, long press "Set/TOL" button, "TOL" flashes, and long press "Set/TOL" button again.



### 6. Power

- Built-in lithium battery, rechargeable.
- Charge method: Type-C connection.

### 7. Specifications

Type	M15-05	M15-10
Range	0-15mm/0-0.6inch	0-15mm/0-0.6inch
Resolution	0.5µm /0.00002inch	1.0µm/0.00005inch
Accuracy	±2.0µm	±3.0µm
Repeatability	±0.5µm	±1.0µm
Measuring force	≤1.5N	≤1.5N
Data output	USB virtual keyboard	USB virtual keyboard
Battery	Rechargeable lithium battery	Rechargeable lithium battery
Weight	150g	150g

### 8. Notice

Do not drop the indicator or apply excessive force to the indicator. Do not disassemble the indicator. Do not press the buttons with a pointed object. Do not use or store the indicator under direct sunlight, or in an excessively cold or heat environment. Do not use the indicator in the environment with high voltage or in strong magnetic fields. Use dry soft cloth or cotton to wipe stains off the surface. Do not use any organic solvent such as acetone or benzene. Clean the indicator with alcohol before use, if kept for a long time.



### 9. Common problems and solutions

No.	Failures	Causes	Resolution
1	"Err01"	Weak signal	Re-start
2	"Err10"	Startup with exception	Re-start
3	"Err29"	Fail to read ABS data	Re-start
4	"Err41"	Preset data over limit	Re-input Preset data
5	"Err42"	Upper limit ≤ Lower limit (TOL)	Re-input tolerance limits
6	"Err51"	Measuring data over range	Re-start
7	"Err61"	Hold "Power" button too long	Press < 5s
8	Full screen flashing	Fail to read data	Re-start
9	Measuring data incorrect	1. Contact points are dirty. 2. Preset data is incorrect. 3. Contact point is loose.	1. Clear contact point. 2. Re-input Preset data 3. Fix contact point.
10	LCD no display Unclear display "□" flashes	Low battery	Recharge the battery
11	Fail to charge	1. Wrong plug-in 2. Battery broken	1. Check plug-in 2. Replace the battery
12	Spindle blocked	Spindle is dirty.	Clean spindle with a little alcohol.