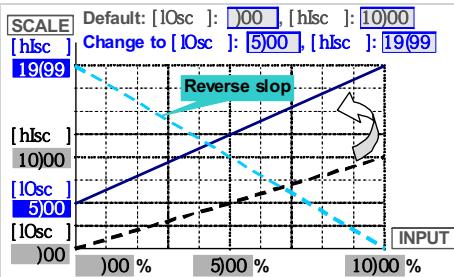


## ■ FUNCTION DESCRIPTION

### Scaling function:

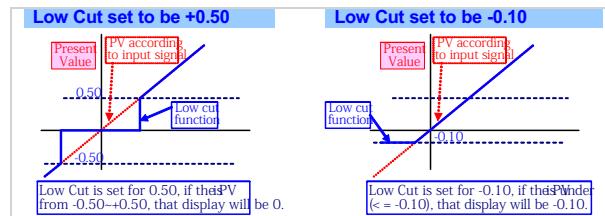
Setting the [ Iosc ] (Low scale) and [ hosc ] (High scale) in [ input group ] to relative input signal. Reverse scaling will be done too. Please refer to the figure as below,



\*Too narrow scale may cause display lower resolution.

### Low cut:

If the setting value is positive, it means when the absolute value of PV  $\leq$  Setting value, the display will be 0. If the setting value is negative, it means when the PV under setting value ( $PV \leq -Setting\ value$ ), the display will be setting value.

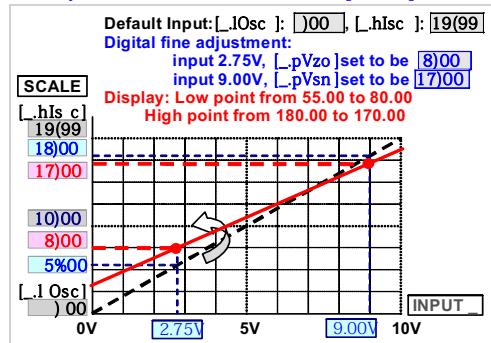


### Digital fine adjustment:

Users can get Fine Adjustment for Zero & Span of PV by front key of the meter, and ?Just Key In? the value which user want to show in the current input signals.

Especially, the [ pVzro ] & [ pVspn ] are not only in zero & span of PV, but also any lower point for [ pVzro ] & higher point for [ pVspn ]. The meter will be linearization for full scale.

The adjustment can be clear in function [ ZSclr ]



### Reading Stable Function

#### Average:

Basically, the sampling rate of meter is 15cycles/sec. If the function set to bc 3 times, It means the meter will update of display will be 5 times/sec.

#### Average set to be 3

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	...
Display Update Value = (Sample 1 + Sample 2 + Sample 3)/3	Display Update Value = (Sample 4 + Sample 5 + Sample 6)/3					

Remark: The higher averaging will cause the response time of Relay and Analogue output slower.

#### Moving average:

If the function to be set 3 times, the meter will update delay in first 3 samples, then it will update 15 times/sec continuously.

#### Moving Average set to be 3

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	...
In first 3 samples, Display Update Value = (Sample 1 + Sample 2 + Sample 3)/3						
Display Update Value = (Sample 2 + Sample 3 + Sample 4)/3						
Display Update Value = (Sample 3 + Sample 4 + Sample 5)/3						
Display Update Value = (Sample 4 + Sample 5 + Sample 6)/3						

Remark: The higher moving average setting will cause the response time of Relay and Analogue output slower after first 3 samples.

#### Digital filter:

The digital filter can reduce the magnetic noise in field.

## ■ ERROR MESSAGE

BEFORE POWER ON, PLEASE CHECK THE SPECIFICATION AND CONNECTION AGAIN.

### SELF-DIAGNOSIS AND ERROR CODE:

DISPLAY	DESCRIPTION	REMARK
ovfl	Display is positive-overflow (Signal is over display range)	(Please check the input signal)
-ovfl	Display is negative-overflow (Signal is under display range)	(Please check the input signal)
ovfl	ADC is positive-overflow (Signal is higher than input 120%)	(Please check the input signal)
-ovfl	ADC is negative-overflow (Signal is lower than input -120%)	(Please check the input signal)
eep → fail	EEPROM occurs error	(Please send back to manufactory for repaired)
aiCng → pv	Calibrating Input Signal do not process	(Please process Calibrating Input Signal)
aic → fail	Calibrating Input Signal error	(Please check Calibrating Input Signal)
aoCng → pv	Calibrating Output Signal do not process	(Please process Calibrating Output Signal)
aoc → fail	Calibrating Output Signal error	(Please check Calibrating Output Signal)

## ■ OPERATING KEY

\*Please access to the Programming Level to check and set the parameters when users start to run the meter

- **Operating Key:** 4 keys for **Enter(Function)** / **Shift(Escape)** / **Up key** / **Down key**
- The meter has designed operation similar as PC's **←→** and **Enter**. In any page, press **key** means "enter" or "confirm setting", and press **key** means "escape(**Esc**)" or "shift".
- In Programming Level, the screen will return to Measuring Page after do not press any key over 2 minutes, or press **key** for 1 second.

	Function Index	Setting Status
<b>Enter/Fun key</b> (= <b>ENT</b> )	(1) In any page, press <b>key</b> to access the level or function index (2) From the function index to access setting status	(3) Setting Confirmed, save to EEPROM and go to next function index
<b>Shift key</b> (= <b>◀▶</b> )	(1) In measuring page, press <b>key</b> for 1 second to access user level. (2) In function index, press <b>key</b> for 1 second to go back upper level. (3) In function group index, press <b>key</b> for 1 second to go back measuring page	(4) In setting status, press <b>key</b> to Shift the setting position. (5) In setting status, press <b>key</b> for 1 second to abort setting and go back this function index.
<b>Up key</b> (= <b>▲</b> )	(1) In function index, press <b>key</b> to go back to previous function index	(2) In setting status for function, press <b>key</b> to select function (3) During number Setting, press <b>key</b> can roll the digit up
<b>Down key</b> (= <b>▼</b> )	(1) In Function Index Page, press <b>key</b> will go to the next Function Index Page.	(2) In setting status for function, press <b>key</b> to select function (3) During number Setting, press <b>key</b> can roll the digit down.

## ■ FRONT PANEL



### ■ Numeric Screens

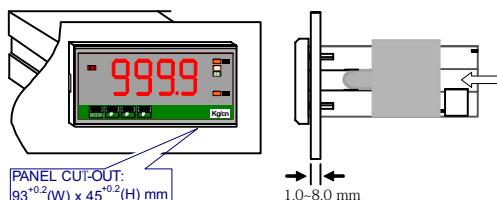
0.8(20.0mm) red high-brightness LED for 4 digital present values.

- **Operating Key:** 4 keys for **Enter(Function)** / **Shift(Escape)** / **Up key** / **Down key**

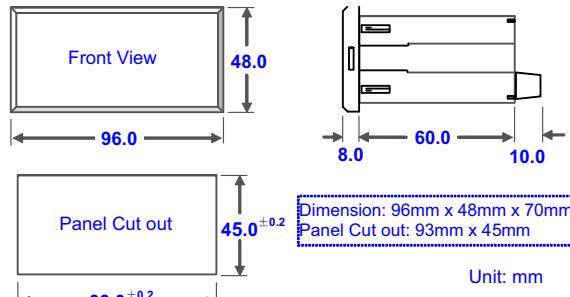
- **Pass Word:** Settable range:0000~9999;  
User has to key in the right pass word so that get into [Programming level]. Otherwise, the meter will go back to measuring page. If user forgets the password, please contact with the service window.

## ■ INSTALLATION

The meter should be installed in a location that does not exceed the maximum operating temperature and provides good air circulation.



## ■ DIMENSIONS

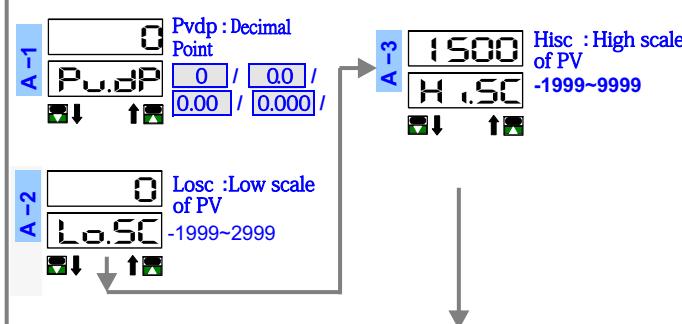


## ■ OPERATING



### User Level

→ Press **key** for 1 sec. can back to Measuring (Front page introduction)



## ■ OPERATING DIAGRAM(The detail description of operation,please refer to operating manual.)

