



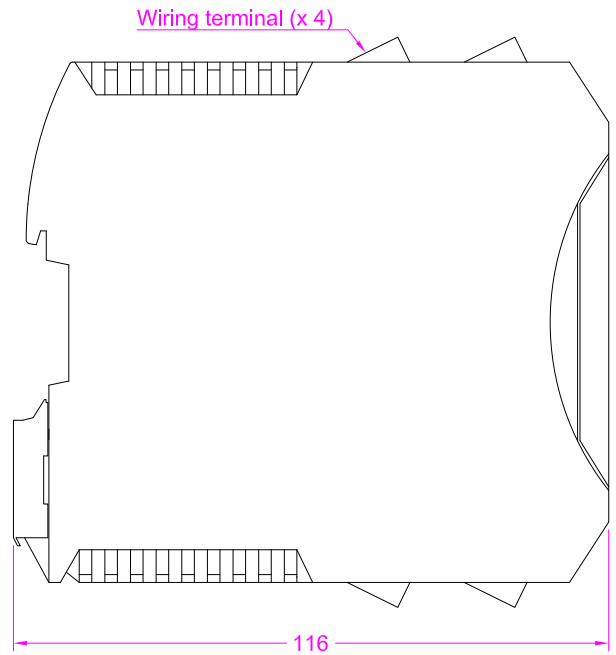
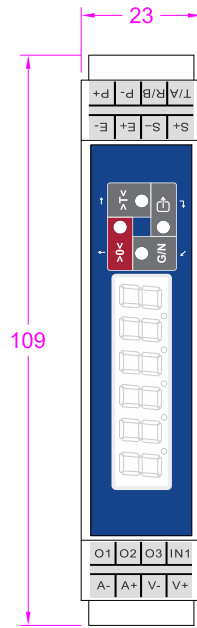
User manual of indicator SDMA

Index

1- Dimensions and wiring terminals -----	P-1
2- Main parameters -----	P-2
3- General parameter setting -----	P-3
4- 2-point reference load calibration -----	P-5
5- Multi-point reference load calibration-----	P-6
6- Sensitivity calibration -----	P-8
7- Communication parameter setting-----	P-9
8- Analog output setting -----	P-10
9- 3-output setting -----	P-11
10- Zero resetting -----	P-12
11- Modbus RTU command example -----	P-12
12- Reserved functions -----	P-12
13- Error alarm -----	P-12



1- Dimensions and wiring terminals



S+	S-	E+	E-
For load cell connection			
T/A	R/B	P-	P+
RS485 output		Power input (12~26V DC)	

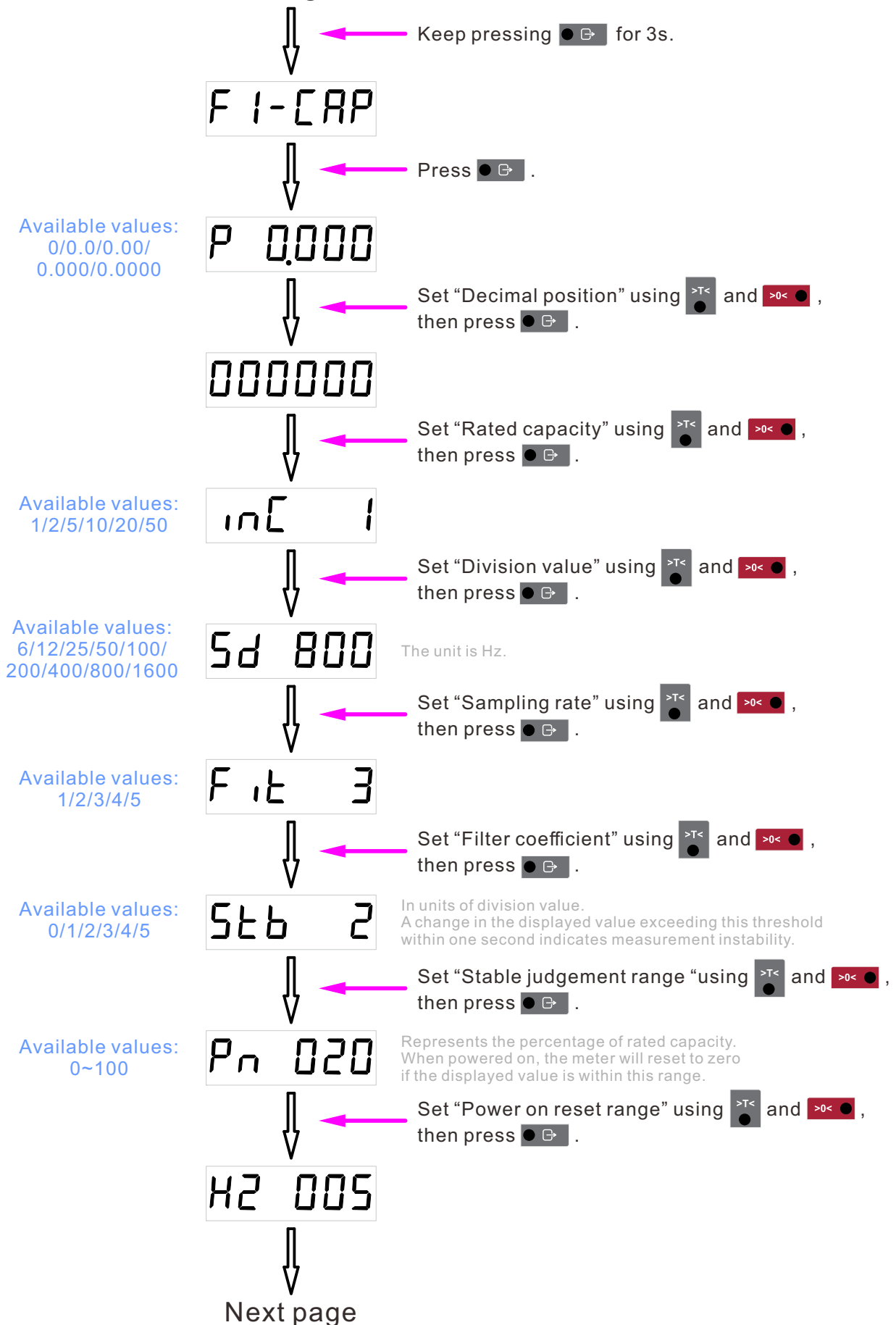
O1	O2	O3	IN1
1 input & 3 outputs			
A-	A+	V-	V+
Analog output		Power input for I/O (12~26V DC)	

2- Main parameters

Ordering code	SDMA
Power supply	12~26 V DC
Power consumption	<2W
ADC	24 bit
Isolation voltage	1500V
Excitation for sensor	5V DC
Applicable sensor sensitivity	<4mV/V
Display range	-99999...999999
Non-linearity	<0.01% F.S.
A/D rate	6/12/25/50/100/200/400/800/1600Hz
Gain drift	<10PPM/°C
Working temp.	0...+50°C
Relative humidity	<80% R.H (without condensation)
I/O	1 input (PNP, for zero resetting)
	3 outputs (NPN, max 500mA, passive output)
Serial communication	RS485
Analog output	0-10V,0-5-10V,4-20mA,4-12-20mA (14 bit, switchable)
Housing	ABS
Ingress protection	IP20
Net weight	About 130g
Installation	35mm DIN rail

3- General parameter setting

Measuring status



Available values:
0~100

H2 005

Represents the percentage of rated capacity.
The meter can be manually cleared to zero if
the displayed value is within this range.



Set "Manual zero reset range" using **>T<** and **>0<** ,
then press **●G** .

Available values:
0~999999

0000 10

The transmitter performs automatic zeroing
if the displayed value is within this range
and is stable for more than 1s.



Set "Automatic zero reset range" using **>T<** and **>0<** ,
then press **●G** .

Available values:
0/1

Lo 1

1: Display negative value
0: Do not display negative value



Set "Negative value display" using **>T<** and **>0<** ,
then press **●G** .

Available values:
0/1

256 0

1: Manual zeroing can only be performed when the meter is stable.
0: No stable judgement when manual zeroing.



Set "Stable judgment when clearing" using **>T<** ,
then press **●G** .

Available values:
0~50

d5 50

Indicates the number of display updates per second.



Set "Display speed" using **>T<** and **>0<** ,
then press **●G** .

F 1-CAP



Press **●G/N** .

SAVE



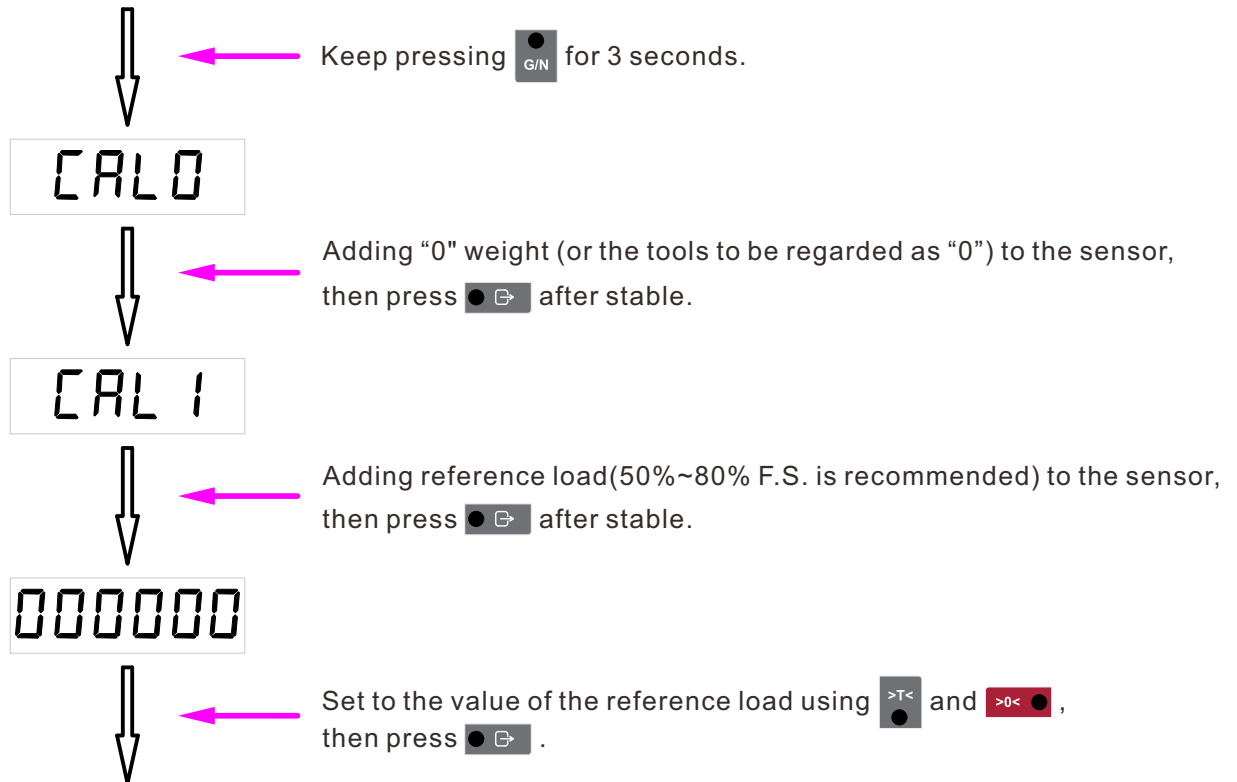
Press **●G** to save the settings.

Measuring status

4- 2-point reference load calibration

Please set the general parameters before calibration.

Measuring status



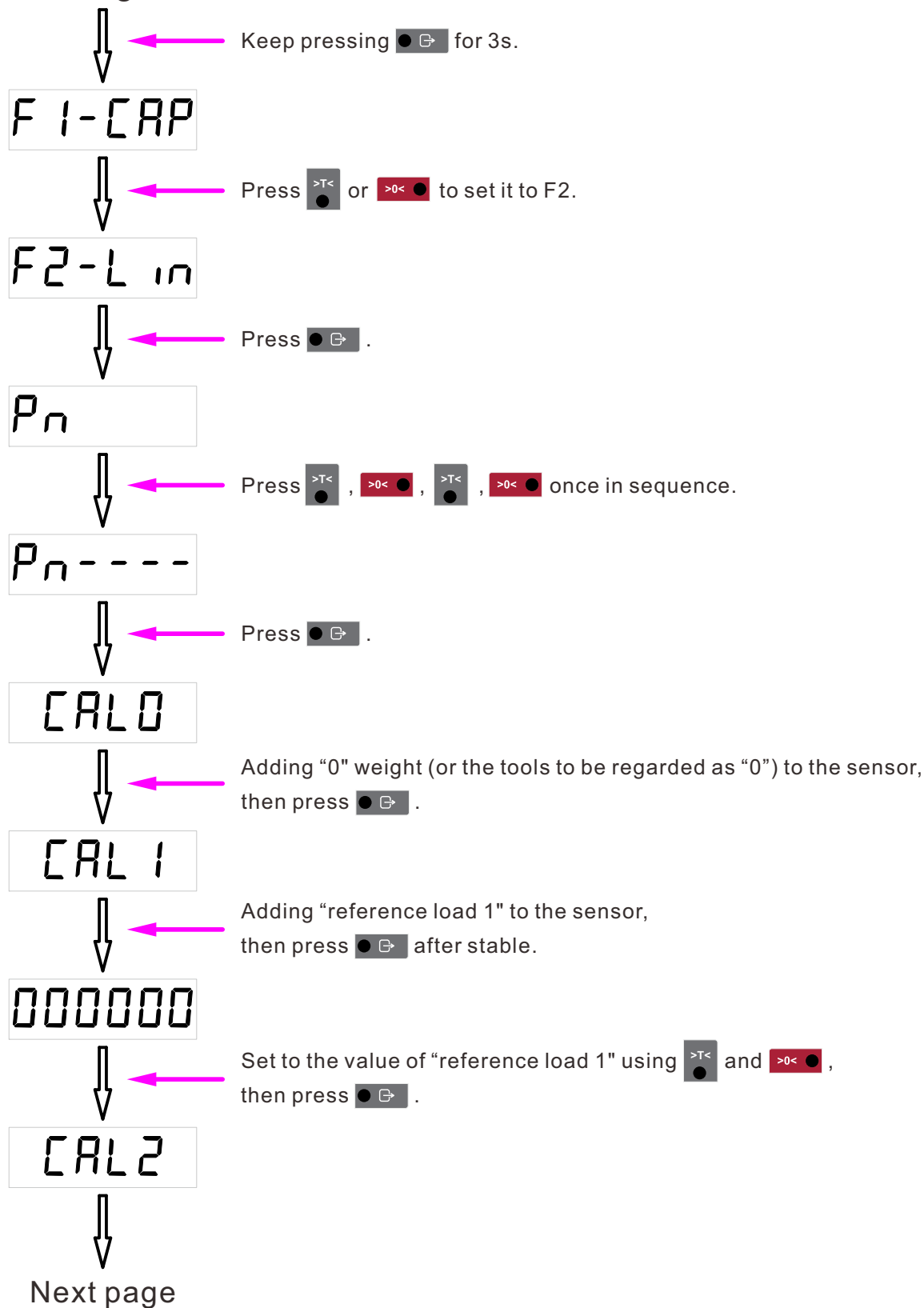
Measuring status

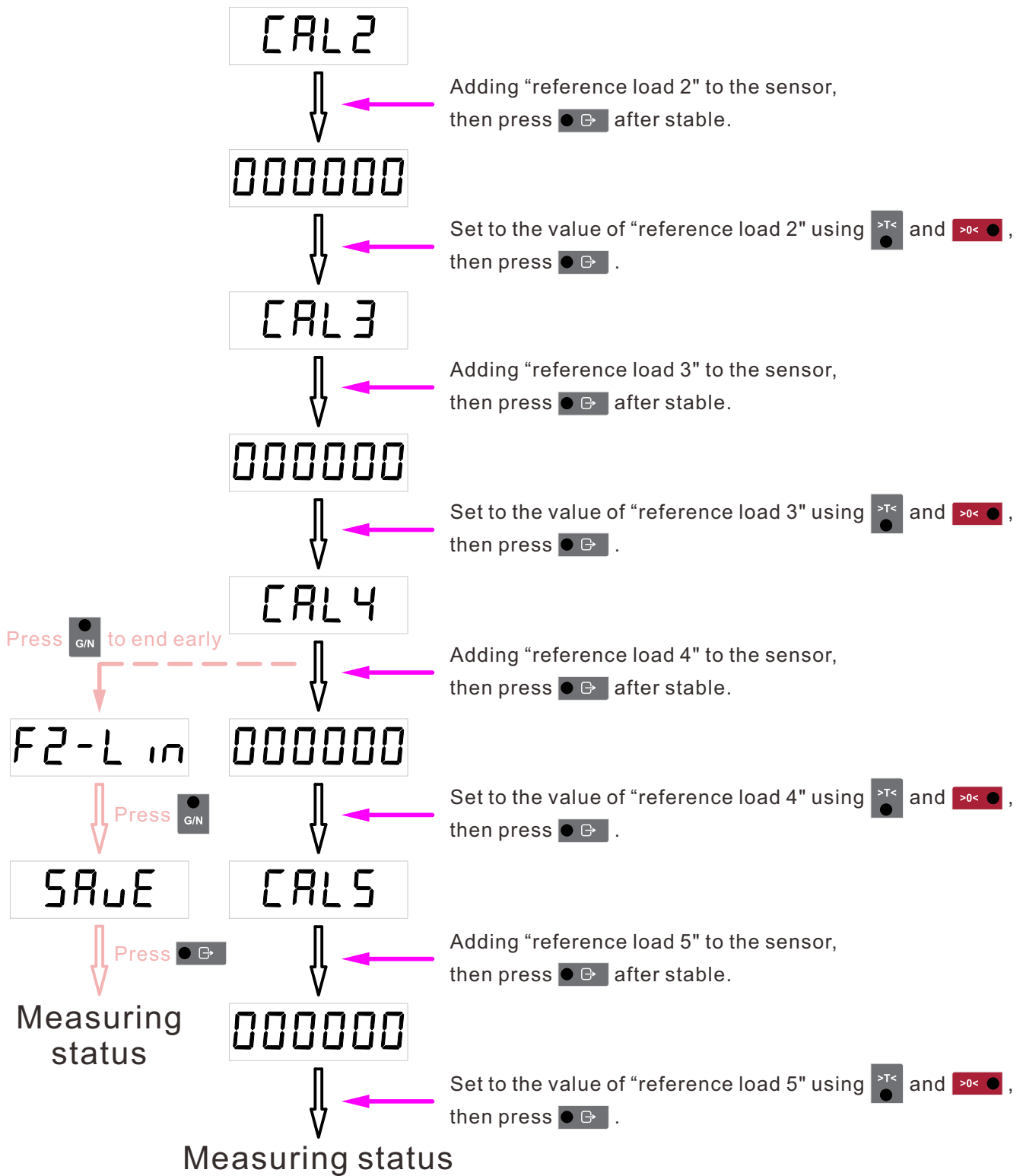
It should now display the value of the reference load if calibrated correctly.

5- Multi-point reference load calibration

Please set the general parameters before calibration.

Measuring status





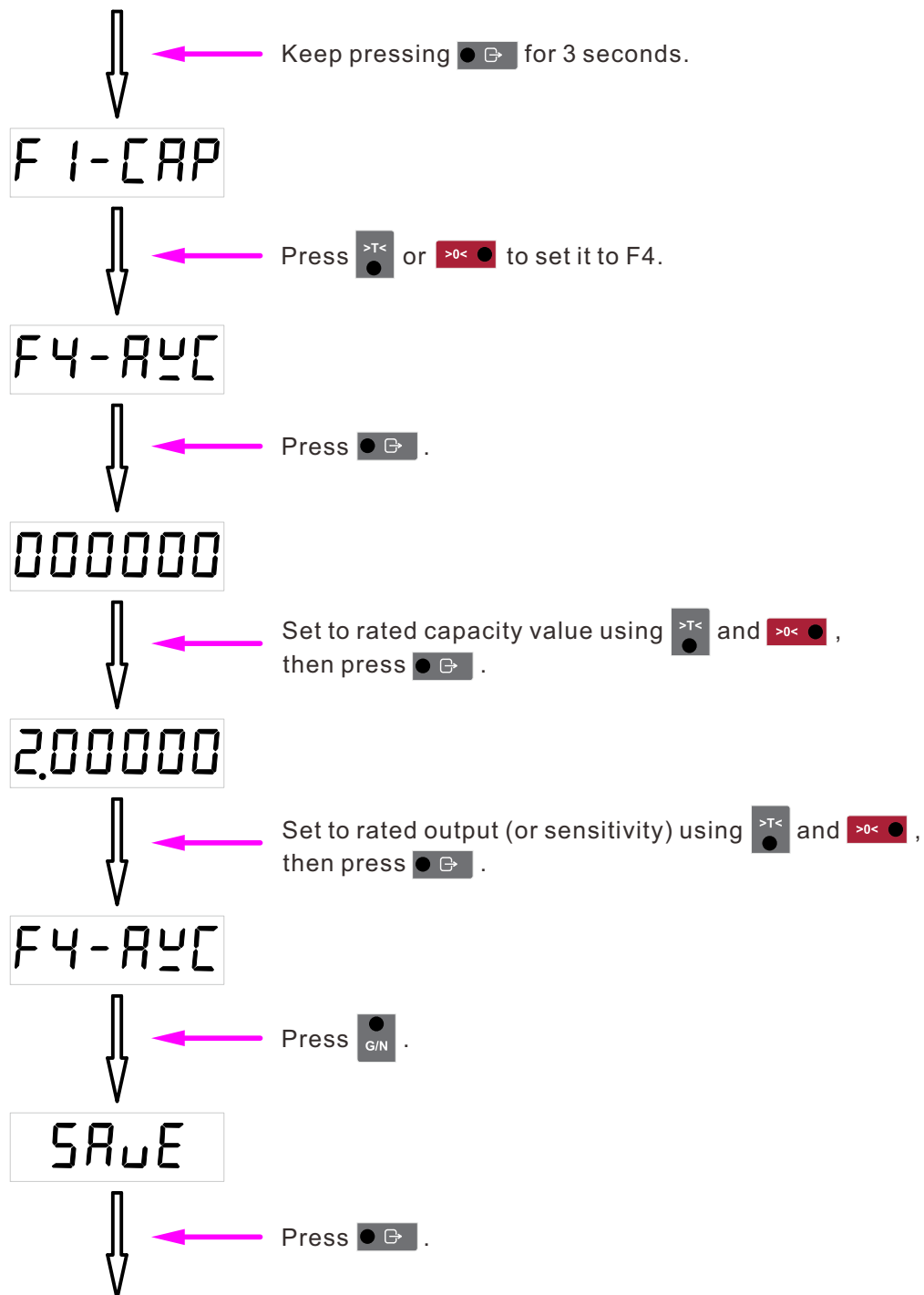
It should now display the value of "reference load 5" if calibrated correctly.

■ Reference load 5 > Ref. load 4 > Ref. load 3 > Ref. load 2 > Ref. load 1

6- Sensitivity calibration

Please set the general parameters before calibration.

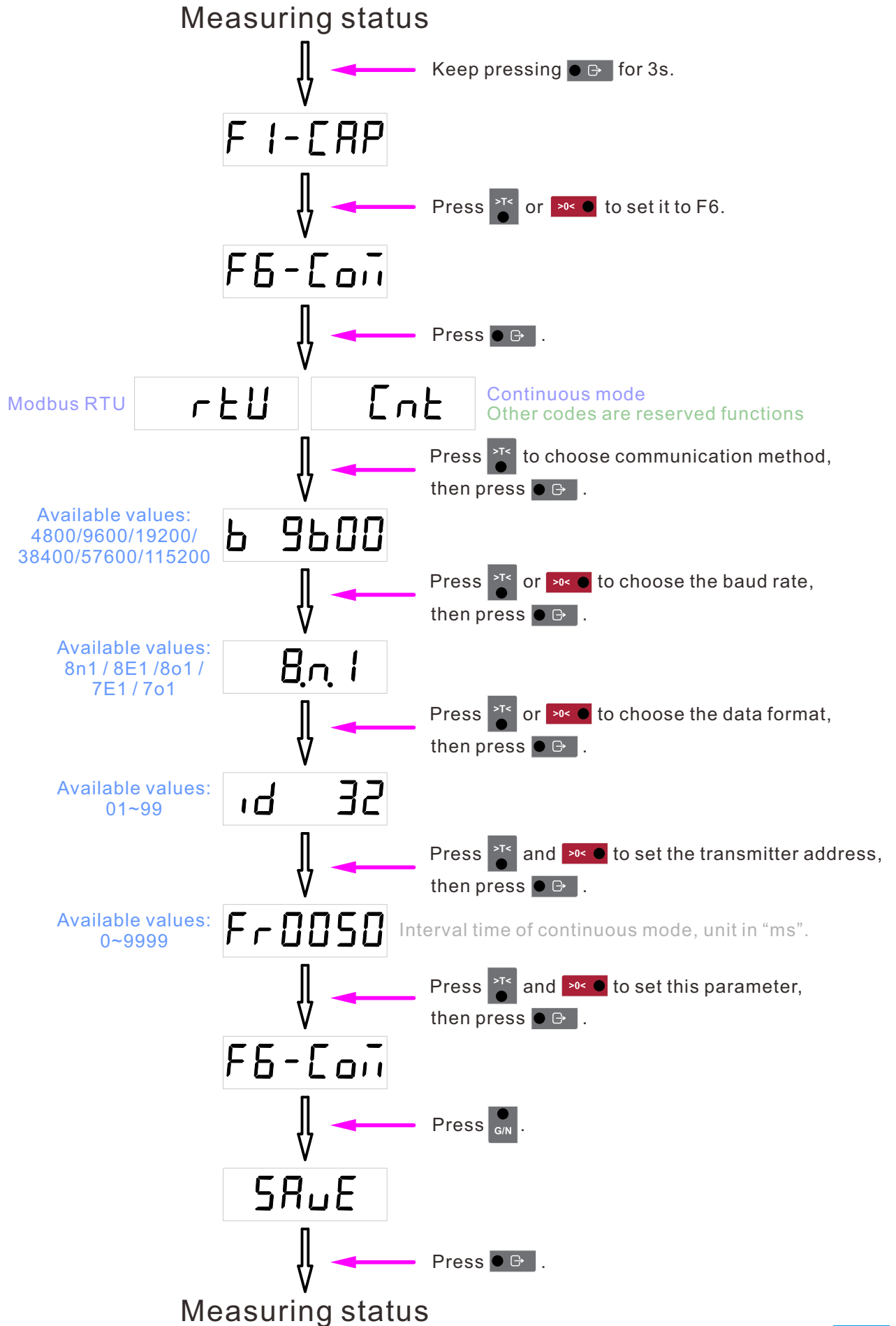
Measuring status



Measuring status

■ Sensitivity calibration is less accurate than reference load calibration.

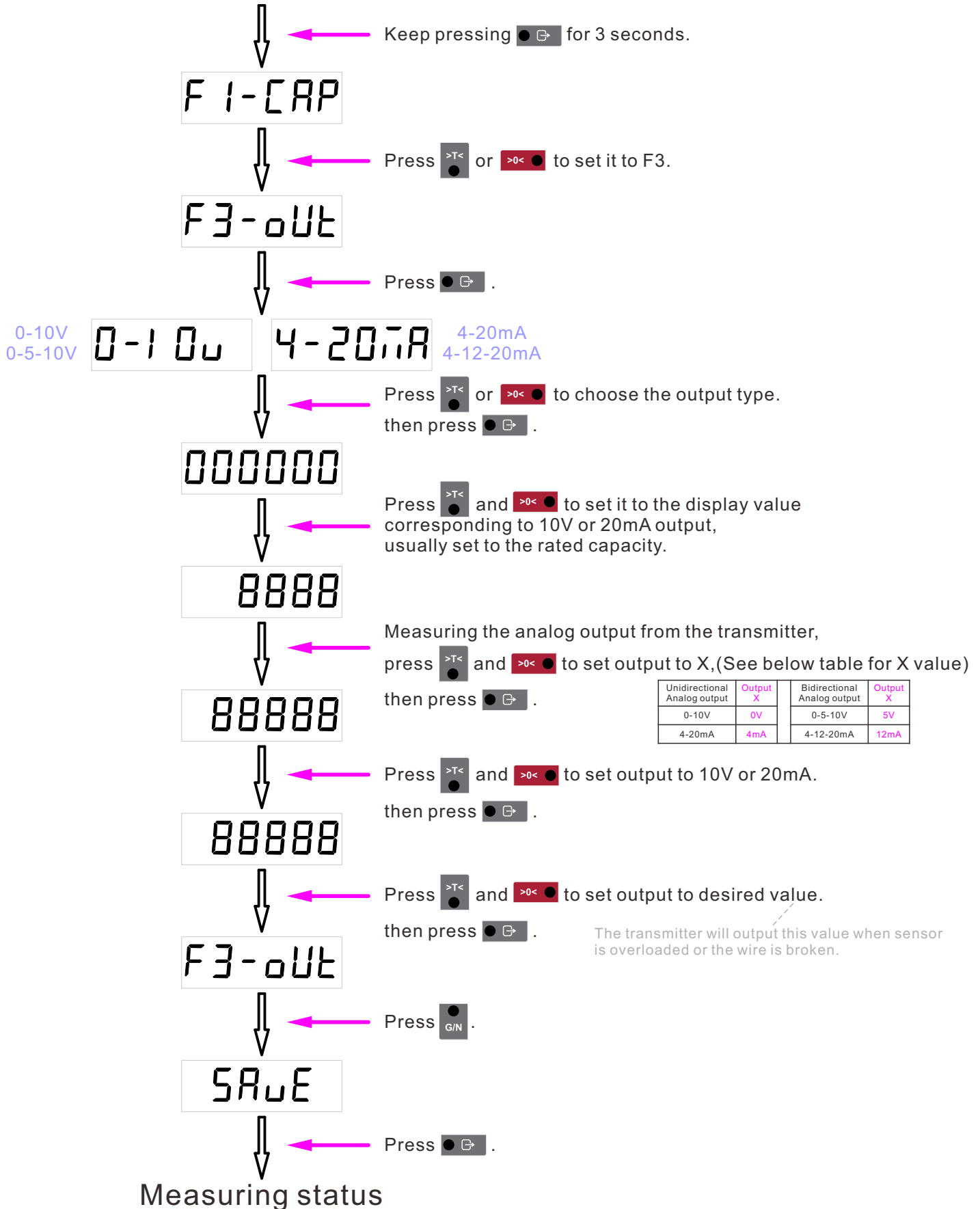
7- Communication parameter setting



8- Analog output setting

Please perform the settings after calibration and prepare a multimeter before setting.

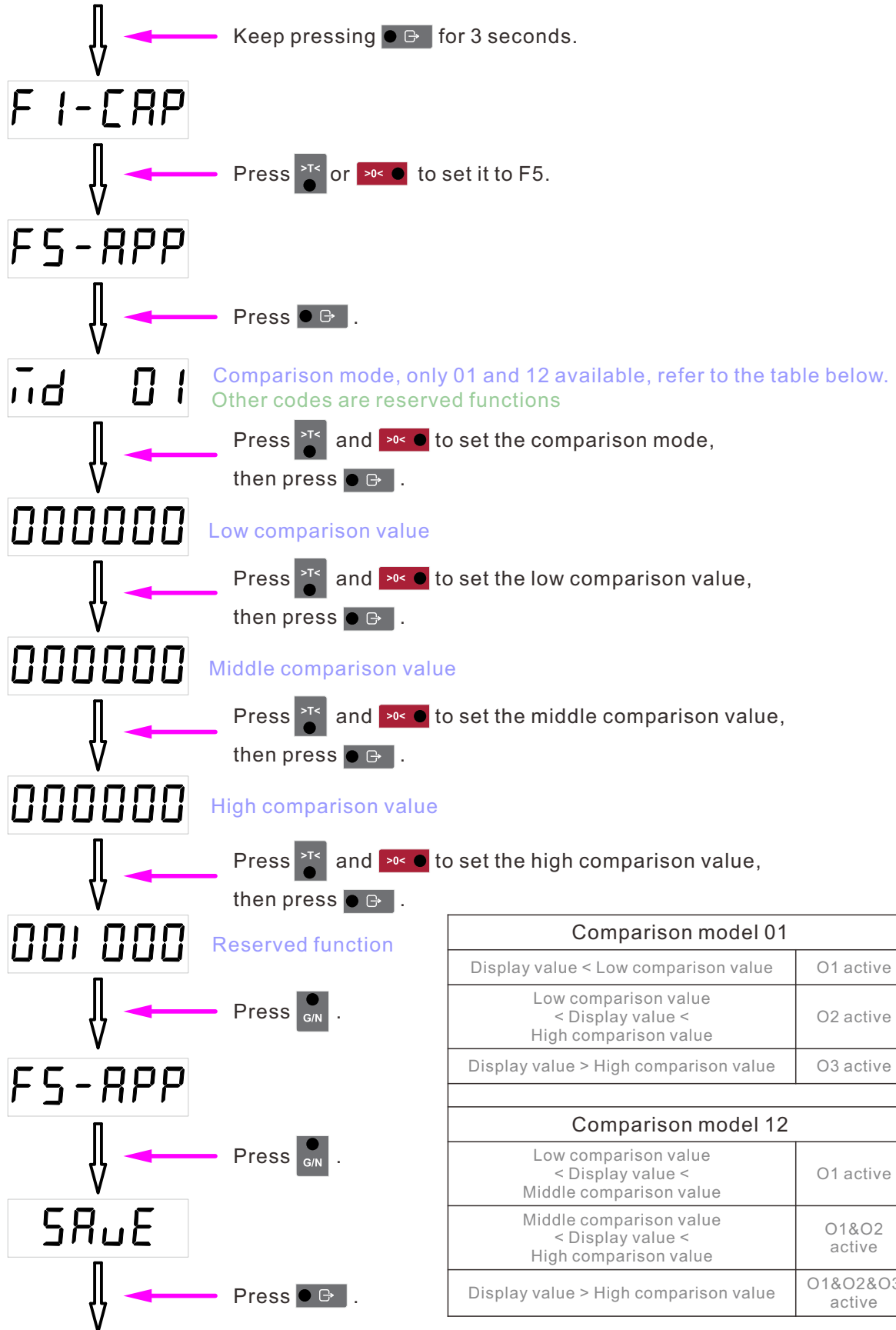
Measuring status



9- 3-output setting

Please perform calibration before setting.

Measuring status



Comparison model 01	
Display value < Low comparison value	O1 active
Low comparison value < Display value < High comparison value	O2 active
Display value > High comparison value	O3 active
Comparison model 12	
Low comparison value < Display value < Middle comparison value	O1 active
Middle comparison value < Display value < High comparison value	O1&O2 active
Display value > High comparison value	O1&O2&O3 active

Measuring status

10- Zero resetting

Manual zero reset: Keep pressing  for 3s to manually reset the display value.

External trigger for zero reset: The meter will reset to 0 when IN1 is valid.

Zero resetting by command: Taking address 32 for example:

Send: 20 06 00 02 00 01 EF 7B

Return: 20 06 00 02 00 01 EF 7B

“Manual zero reset range” and “Stable judgement when clearing” affects zero resetting.

11- Modbus RTU command example

Read the display value (Address 32, display value 380)

Send: 20 03 00 00 00 02 C2 BA

Return: 20 03 04 01 7C 00 00 0B 15

12- Reserved functions

F8 and F9 are reserved functions, do not enter without the manufacturer's instructions.

13- Error alarm



Overload alarm.



Manual zero reset failed.(Out of manual zero reset range or unstable)



Calibration operation failed.(Do not perform the current operation)



Sensor is not connected properly.