Brief Instructions for Basic^{plus}
Standard Balances and Verified Balances

Key Functions

Key	Function
TARE	Zeros the display
I/⏻	Turns the balance on and off
CF	Clears the stored reference value, for application programs
CAL	Adjustment/calibration or sensitivity test, depending on the code setting
F	Application programs: Tare memory, activates the counting, weighing in percent, and animal weighing programs; stores the reference value in the non-volatile memory
⊙	Data output (print)

Simple Weighing

– Press TARE to zero the display
– Place container on pan; then press TARE
– Place sample on pan/add sample to container
– Wait until stability symbol "g" is displayed; then read off weight

To adapt your Basic^{plus} balance to ambient conditions and to your special requirements, please set the appropriate codes in the balance operating menu.

Setting a Menu Code

Turn off the balance; then turn it back on. While all segments are displayed, briefly hold down TARE.

Release TARE once "1" is displayed.
If "-" is displayed next to the left-hand number, adjust the menu access switch.
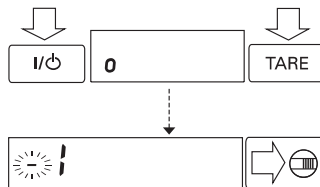
Use the CAL key to select a menu code (increase a number by one with each press) and the ⎡ ⊙ ⎤ key to move to the next of the three numbers (1st-2nd-3rd-1st, etc.; see diagram on the right).
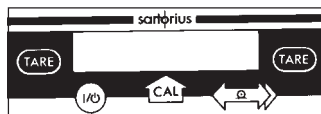
Press TARE to confirm your selection.

To make additional code changes, press the ⎡ ⊙ ⎤ key to return to the first digit.

Press TARE for more than 2 seconds to store the new menu code setting.

Adjustment/Calibration

External[1]) (Code 1 9 1):
Clear weighing pan
Tare
Press CAL:

$$\boxed{0.00 \quad g} \quad \fbox{CAL}$$

$$\boxed{+ \; 2000.00}_{\textbf{CAL}}$$

Center required weight
on pan

Internal[2]) (Code 1 9 3):
Clear weighing pan
Tare
Press CAL:

$$\boxed{0.0000 \quad g} \quad \fbox{CAL}$$

$$\boxed{C}_{\textbf{CAL}}$$
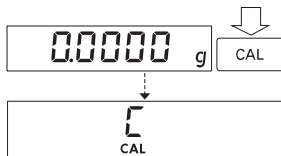
Sensitivity Test[2]) (Code 1 9 4)

Clear weighing pan
Tare

Press CAL:

$$\boxed{0.0000 \quad g} \quad \fbox{CAL}$$

$$\boxed{}_{\textbf{CAL}}$$

$$\boxed{- \; 0.0004}_{\textbf{CAL}}$$
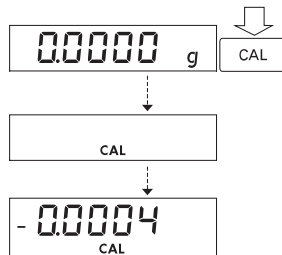
After the system stabilizes,
the deviation of the current
weight readout from the
target weight is displayed.

To adjust/calibrate the
balance automatically using
the built-in weight:
Press CAL
or
To quit the sensitivity test:
Press CF

[1]) = not applicable to verified
balances of accuracy class Ⅱ
[2]) = applicable to balances with
a built-in automatic calibration
function

All Menu Code Settings at a Glance

These charts summarizing the menu parameters are intended to give you a quick reference guide.

The Most Important Menu Codes
for the Weighing Mode:

Ambient conditions	Code		
Very stable	1	1	1*
Stable	1	1	2*
Unstable	1	1	3
Very unstable	1	1	4

Weighing-filling	Code		
Standard weighing	1	2	1*
Filling	1	2	2

Stability range

When the stability symbol
(unit symbol) is displayed, the
weight readout is stable within
the range defined in digits.

	Code		
0.25 digit	1	3	1
0.5 digit	1	3	2*
1 digit	1	3	3
2 digits	1	3	4*
4 digits	1	3	5
8 digits[1]	1	3	6

Tare parameter[3]	Code		
At any time	1	5	1
After stability	1	5	2*

Auto zero function	Code		
On	1	6	1*
Off	1	6	2

**Adjustment/calibration
and linearization functions**

	Code		
External calibration[3]	1	9	1*
Internal cal. for balances w/built-in auto. cal. func.	1	9	3*
Sensitivity test for bal. w/built-in auto. cal. func.	1	9	4
External Linearization (only for the BP210D, BP300S)	1	9	5
Functions blocked	1	9	7

* = factory setting; depends on the balance
     model, in some cases
[1] = not applicable to verified balances

Weight Units	Code				
	1st level			2nd level	
Grams (o)	1	7	1	3 1 1	
Grams	1	7	2*	3 1 2*	
Kilograms[2]	1	7	3*	3 1 3*	
Carats[1]	1	7	4	3 1 4	
Pounds[1]	1	7	5	3 1 5	
Ounces[1]	1	7	6	3 1 6	
Troy ounces[1]	1	7	7	3 1 7	
Hong Kong taels[1]	1	7	8	3 1 8	
Singapore taels[1]	1	7	9	3 1 9	
Taiwanese taels[1]	1	7	10	3 1 10	
Grains[1]	1	7	11	3 1 11	
Pennyweights[1]	1	7	12	3 1 12	
Milligrams[3]	1	7	13	3 1 13*	
Parts/pound[1]	1	7	14	3 1 14	
Chinese taels[1]	1	7	15	3 1 15	
Mommes[1]	1	7	16	3 1 16	
Austrian carats[1]	1	7	17	3 1 17	
Tola[1]	1	7	18	3 1 18	
Baht[1]	1	7	19	3 1 19	
Mesghal[1]	1	7	20	3 1 20	

Display Mode

	Code	
	1st level	2nd level
Highest possible accuracy	1 8 1*	3 2 1*
Last numeral blanked when load changes	1 8 2	3 2 2
Rounding factor 2[1)	1 8 3	3 2 3
Rounding factor 5[1)	1 8 4	3 2 4
Rounding factor 10[1)	1 8 5	3 2 5

Application Programs

Program	Code
F key blocked	2 1 1*
Additional 2nd level	2 1 2
Counting	2 1 4
Weighing in percent	2 1 5
Tare memory	2 1 6
Animal weighing	2 1 7

Readout in percent	Code
W/o a decimal place	3 6 1
1 decimal place	3 6 2*
2 decimal places	3 6 3*
3 decimal places	3 6 4

Storage parameter for the ref. wt./value	Code
With full accuracy acc. to internal resolution	3 5 1
Acc. to display accuracy	3 5 2*

Animal weighing Delay start until…	Code
diff. is slight	3 7 1
diff. is average	3 7 2*
diff. is considerable	3 7 3

Animal weigh. start mode	Code
Manual	3 8 1
Automatic	3 8 2*

[2) = not applicable to verified balances of accuracy class I

[3) = not applicable to verified balances of accuracy class II

Interface

Baud rate	Code
150 baud	5 1 1
300 baud	5 1 2
600 baud	5 1 3
1,200 baud	5 1 4*
2,400 baud	5 1 5
4,800 baud	5 1 6
9,600 baud	5 1 7
19,200 baud	5 1 8

Parity	Code
Mark[1)	5 2 1
Space[1)	5 2 2
Odd	5 2 3*
Even	5 2 4

Number of stop bits	Code
1 stop bit	5 3 1*
2 stop bits	5 3 2

Handshake mode	Code
Software	5 4 1
Hardware, 2 char.	5 4 2*
Hardware, 1 char.	5 4 3

Utilities

Data output	Code
Regardless of stability	6 1 1
After stability	6 1 2*
At stability	6 1 3
Auto. regardless of stab.	6 1 4
Auto. at stability	6 1 5

Auto print	Code
Using the ⊡ key	6 2 1
Not stoppable	6 2 2*

Data output after…	Code
1 display update	6 3 1*
2 display updates	6 3 2

Appl. prog. parameters	Code
Off	7 1 1*
Ref. value and ref. wt.	7 1 2

Data ID codes	Code
Without	7 2 1*
With	7 2 2

Output of the tare memory data	Code
Last net value	7 3 1*
Tare memory	7 3 2

Additional Functions

Access to menu	Code[1]
Accessible	8 1 1
Depends on setting of menu access switch	8 1 2*

Key functions	Code
Accessible	8 3 1*
Blocked	8 3 2

Universal switch for remote control	Code
Print ⊡	8 4 1*
Tare TARE	8 4 2
Adj. or cal./lineariz. CAL	8 4 3
F key	8 4 4
CF key	8 4 5

Power-on mode	Code
Off – on – standby	8 5 1*
On – standby	8 5 3
Auto. power-on	8 5 4

ISO/GLP-compliant Printout/Record

Measured values, and the data of adjustment/calibration or linearization operations, along with the date, time and serial number of the particular balance are output automatically via the data interface (code 7 2 2 must also be set)

	Code
Off	8 10 1*
only for adj. or cal./ linwariz. func.	8 10 2
On	8 10 3

Reset Function

This function enables you to reset all menu codes back to the original factory settings, which are identified by an "*."

Reset function	Code
On	9 – – 1
Off	9 – – 2