

Calibrating Flinn Scientific Balances



Introduction

The basics of calibrating Flinn Scientific electronic balances will be covered in this instruction sheet.

Concept

- Calibration

Materials

Flinn Scientific electronic balance

Metric weights, masses will vary for individual balances.

Flinn Electronic Balance Calibration (OB2090, OB2093, OB2094, OB2095, OB2096, OB2097)

1. Turn the balance on using the **ON/OFF** button.
2. Zero the balance using the **ZERO** button.
3. Press the **CAL** button to begin calibration.
4. The preset required calibration weight will be shown.
5. To select a different calibration weight value, press the **F** button repeatedly until the desired calibration weight is displayed.
6. Confirm calibration weight value and press the **ENTER** button. CAL will be shown followed by the flashing required calibration weight.
7. Place the required calibration weight on the balance.
8. Wait approximately 10 seconds and remove the calibration weight.
9. Calibration is now complete.

Flinn Scientific Economy Choice Electronic Balance Calibration (OB2088, OB2089)

1. Turn the balance on using the **ON/OFF** button.
2. Zero the balance using the **ZERO** button.
3. Press and hold the **MODE/CAL** button for 5 seconds to begin calibration.
4. The preset calibration weight will be shown.
5. Place the required calibration weight on the balance.
6. Remove the calibration weight when the weighing unit (i.e., "g" for grams) is displayed next to the weight.
7. Calibration is now complete.

Flinn Scientific Analytical Balance Calibration (OB2091, OB2092)

1. Turn the balance on using the **ON/OFF** button.
2. Zero the balance using the **ZERO** button.
3. Press the **CAL** button to begin calibration.
4. The preset required calibration weight will be shown.
5. Place the required calibration weight on the balance.
6. Remove the calibration weight when the weighing unit (i.e. “g” for grams) is displayed next to the weight.
7. Calibration is now complete.

Flinn Scientific Electronic Balances Error Codes (OB2090, OB2093, OB2094, OB2095, OB2096, OB2097)

Error codes are shown on the main display for approx. 2 seconds. The program then returns automatically to the previous mode.

Display/Problem	Cause	Solution
No segments appear on the display	No power available The AC adapter is not plugged in Battery is drained	Check the power supply Plug in the AC adapter Replace battery; recharge battery using external charger
oL	The load exceeds the balance capacity	Unload the balance
uL	Weighing pan not in place Something is touching the weighing pan	Place the weighing pan on the balance Move the object that is touching the weighing pan
dlsErr	Display overflow: Value cannot be shown on the display	Reduce load on the balance
CALErr	Calibration parameter not met; e.g.: – Balance not zeroed – Balance is loaded	Calibrate only when zero is displayed Press (ZERO) to tare the balance Unload the balance
APPErr	Weight is too light or there is no sample on the balance with application in use	Increase the weight on the balance
Max. weighing capacity is less than indicated under “Specifications”	The balance was switched on without the weighing pan in place	Place the weighing pan on the balance and press (ON/OFF)
The weight readout is obviously wrong	The balance was not calibrated/adjusted before weighing Balance not zeroed	Calibrate/adjust the balance Zero the balance

Flinn Economy Choice Balance Error Codes (OB2088, OB2089)

Display/Problem	Cause	Solution
No segments appear on the display	AC adapter is not plugged in	Plug in AC adapter
-H-	The load exceeds the balance capacity	Unload the weighing pan
-L-	Weighing pan not in place	Place the weighing pan correctly on the balance
Err56	Preload during power-up too high	Unload the pan and switch on the balance again. The weighing pan may not touch any surrounding items
Err2	Calibration condition not met, e.g.: Balance not zeroed The weighing pan is loaded	Unload balance and press (ZERO) Calibrate only when zero is displayed
Max. weighing capacity is less than indicated under "Specifications"	The balance was switched on without the weighing pan in place	Place the weighing pan on the balance and press ON/OFF
The weight readout is obviously wrong	The balance was not calibrated/adjusted Balance not zeroed	Calibrate/adjust the balance Zero the balance

Flinn Scientific Analytical Balance Error Codes (OB2091, OB2092)

Error codes are shown on the main display for 2 seconds. The program then returns automatically to the previous mode (e.g., weighing).

Display	Cause	Solution
No segments appear on the display	No AC power is available The AC adapter is not plugged in Battery or rechargeable battery pack is discharged	Check the AC power supply Plug in the AC adapter Replace the battery or recharge the battery pack using an external charger
H	The load exceeds the balance capacity	Unload the balance
L and E 54	The weighing pan is not in place Something is touching the weighing pan	Place the weighing pan on the balance Move that object that is touching the weighing pan
E 02	Calibration parameter not met, e.g.: – balance not zeroed – balance is loaded	Unload the balance Press [zero] tare the balance Calibrate only when zero is displayed
E 09	When gross value \leq zero; no tare	Tare the balance
E 10	The [ZERO] key is blocked when there is data in the second tare memory (net-total). Only 1 tare function can be used at a time	Press [CAL] to clear the tare memory and release the tare key

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E 11	Value input is not allowed for second tare memory	Press [ZERO]
E 22	Weight is too light or there is no sample on the balance	Increase the weight on the balance
E 30	Interface port for printer output is blocked	Contact your local Service Center
Max. weighing capacity is less than indicated under "Specifications"	The balance was turned on without the weighing pan in place	Place the weighing pan on the balance and press [ON/OFF] to turn the balance back on
The weight readout is obviously wrong	The balance has not been calibrated/ adjusted The balance was not tared before weighing	Calibrate/adjust the balance Tare the balance