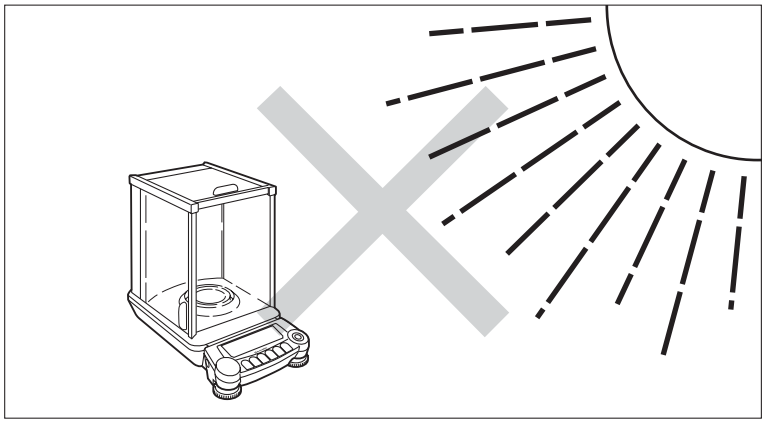
To obtain the best measurement results

Particularly important when measuring in the semi-micro range --- 0.01mg minimum display, small range of AUW120D or AUW220D models.

Read instruction manual also.

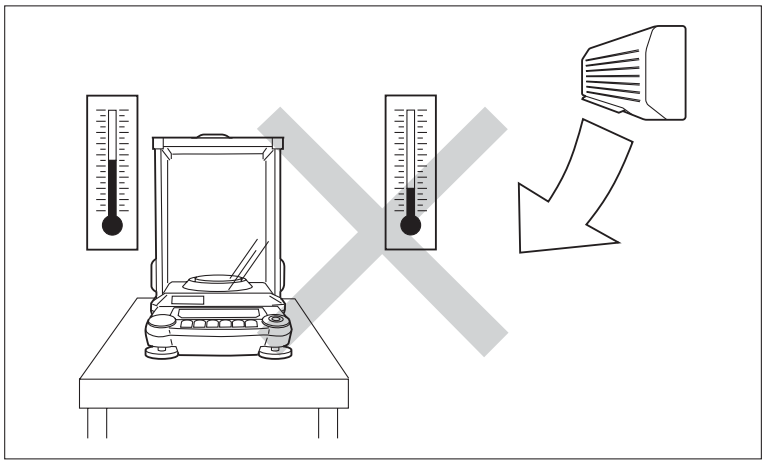
AUW-D/AUW/AUX/AUY series semi-micro and analytical balances produce weighing results with excellent response and stability. A high sensitivity balance also senses any slight turbulence. Therefore, precautions are required to make the best use of their performance. Observe the following in order to obtain the best measurement results.

About Installation



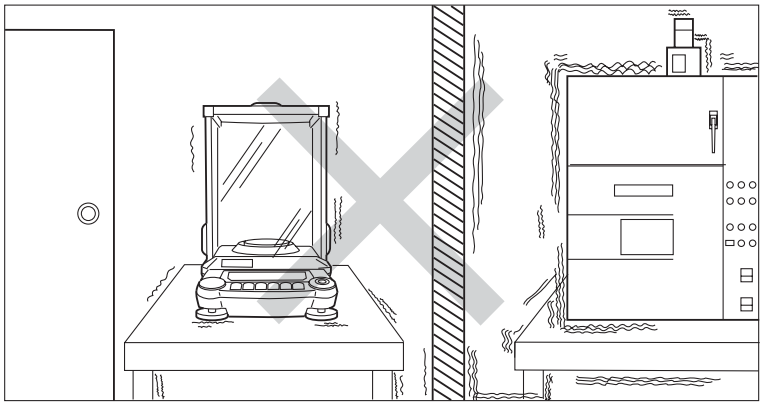
Install the balance away from direct sunlight.

Direct sunlight heats up the weighing chamber, which results in air convection while measuring.



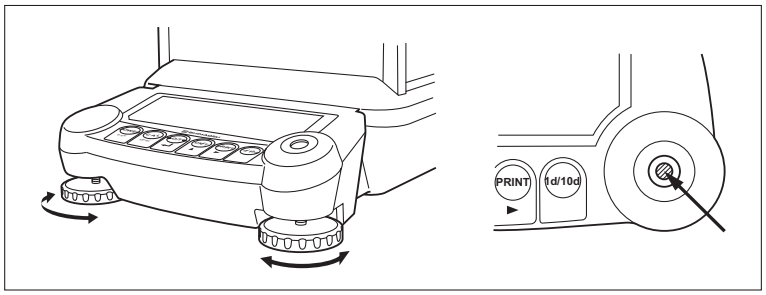
Install the balance away from heating and air conditioning air current.

Heating and air conditioner create air currents which are often much warmer or cooler than the average room temperature. Air currents and temperature differences make measurements unstable.

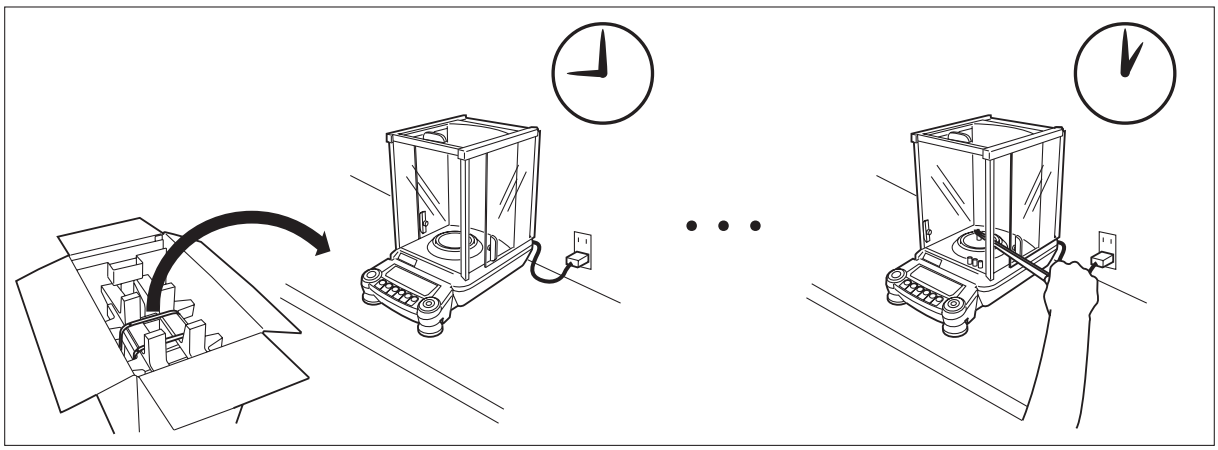


Install the balance where it is free of vibration. Any vibration transmitted from machinery or traffic may reduce the stability of measurements.

Install the balance on a sturdy table at a secure location. Generally, vibrations are smaller at the corners of a room than in the middle.



Perform level adjustment. Correct measurement cannot be performed if the balance is not leveled.

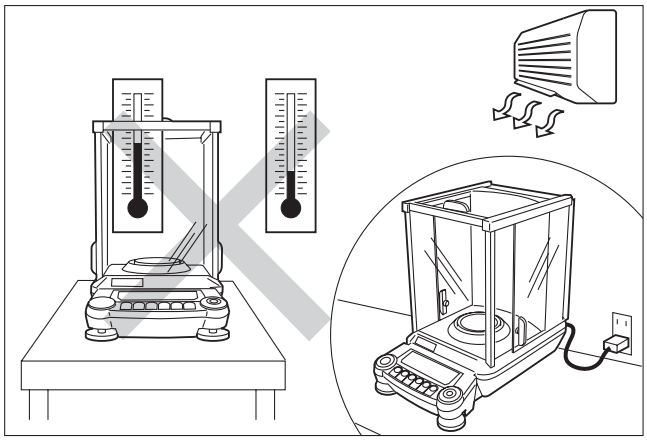


Before use, warm up the balance in weighing or standby mode for one hour (AUW, AUX, AUY series), or for four hours when using small range (0.01mg) of AUW-D. It takes time for the balance display to stabilize when it is first connected to power. Warm up time before stabilization varies depending on the room temperature and the temperature of the balance. If the temperature inside the packing box before unpacking is close to the room temperature, necessary warm up will be short. If temperatures differ much, warm up will take longer.

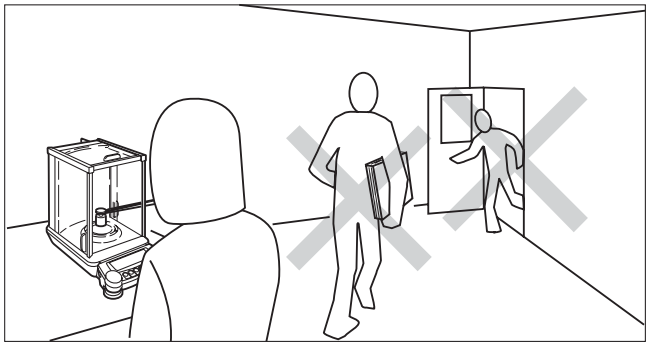
<<About moving the balance >> Allow sufficient warm up time before using the balance again. Warm up is needed even after moving the balance within a room or after a brief disconnection from power especially for the semi-micro range measurements.

To obtain the best measurement results

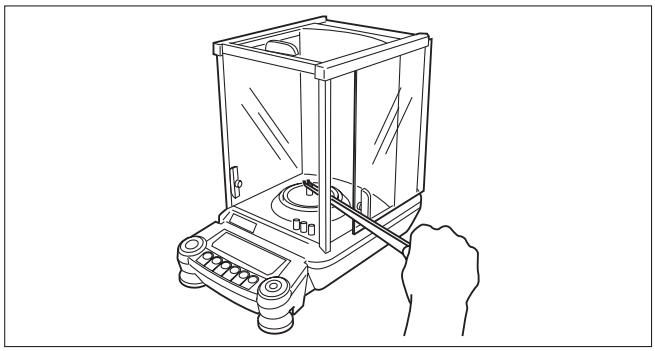
During measurements



Especially with the semi-micro range, do not adjust or reset the air conditioner before or during measurements. When ambient temperature changes, the temperature of the balance takes time to catch up. This temperature difference may remain for a long time after the room air has stabilized. When the temperature inside and outside the balance chamber differs, air convection occurs upon opening the chamber door. This happens even if no direct air current is affecting the balance. Air convection may result in unstable measurements.
When not in use, leave the weighing chamber doors open slightly to prevent temperature differences. Keep the balance connected to the power in weighing or standby mode.

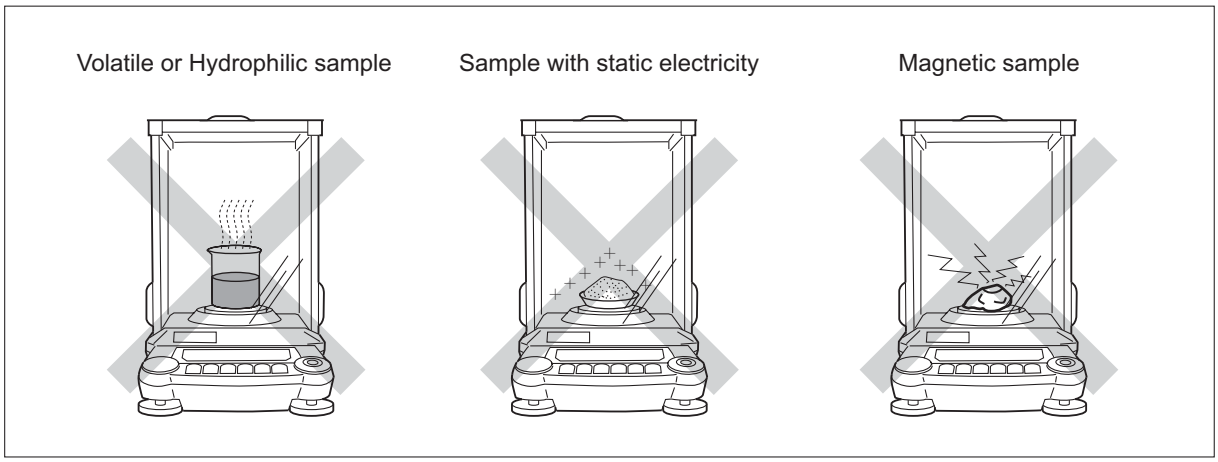


Especially with the semi-micro range, avoid the movement of people into or around the room during measurements.
Measurements may be made unstable by movement of people or opening/closing of the door of the room.



Especially in the semi-micro range measurements, use a long pair of tweezers as much as possible. Inserting the hand in the balance chamber generates air convection as human body emits heat. Convection may make measurements unstable.

Leave the samples inside the weighing chamber before measurements to eliminate temperature difference. Temperature difference between the weighing chamber and the sample also generates air convection.



Samples that volatilize or absorb moisture and samples that are electrically or magnetically charged cannot be correctly weighed without special handling.

Weigh volatile or absorbent samples in a covered container.

Discharge static electricity before measurements.

Demagnetize magnetic samples or elevate the sample from the pan to distance it from the balance mechanism.