

Digital Scale

SJ-F Series

INSTRUCTION MANUAL

SJ-1000H

SJ-2000H

SJ-5000H



SJ-12KH

AND


A&D Company, Limited


SAFETY PRECAUTIONS

All safety messages are identified by the following, “**WARNING**” or “**CAUTION**”, of ANSI Z535.4 (American National Standard Institute: Product Safety Signs and Labels). The meanings are as follows:

 WARNING	A potentially hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	A potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

- ❑ This manual is subject to change without notice at any time to improve the product.
- ❑ Product specifications are subject to change without any obligation on the part of the manufacture.
- ❑ When using the SJ-H, the following safety precautions should always be followed.

 **WARNING** **Use only specified AC adapter for the scale. Other adapter may cause damage (AC adapter is optional). Internal service or adjustment to this product should be performed by a qualified person.**

 **CAUTION** Avoid installing the scale in direct sunlight, which may cause discoloration or malfunctions.

Avoid over and/or shock load that could cause damage to the scale.

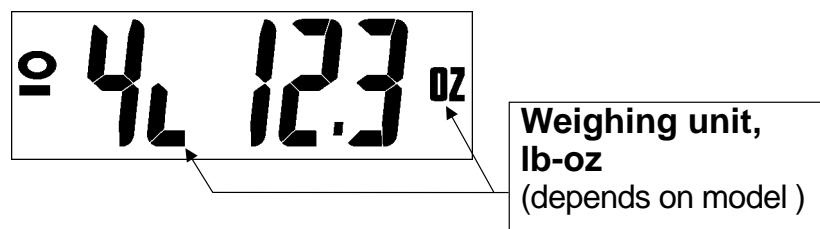
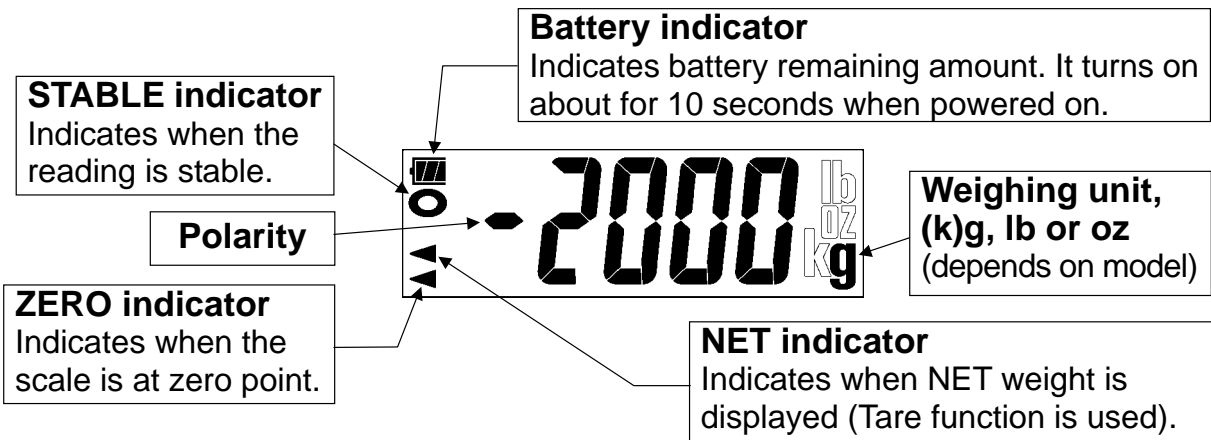
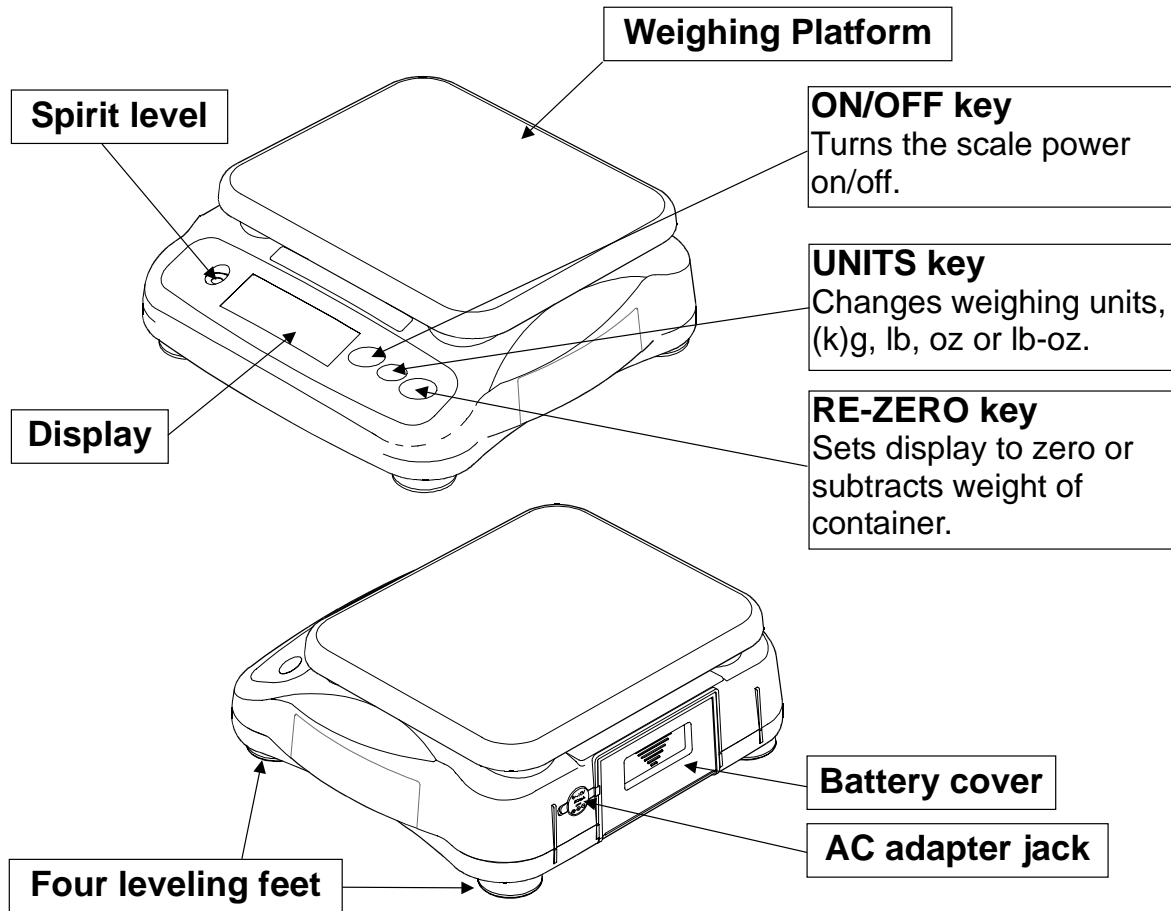
Avoid using the weighing pan to move the scale, as that could cause damage to the scale.

Do not mix the type of batteries. Replace all other batteries at the same time.

If the scale is not to be used for a long period of time, remove all batteries from the battery room to avoid leakage.

The scale is not watertight and avoid exposure to water.

PARTS DESCRIPTION

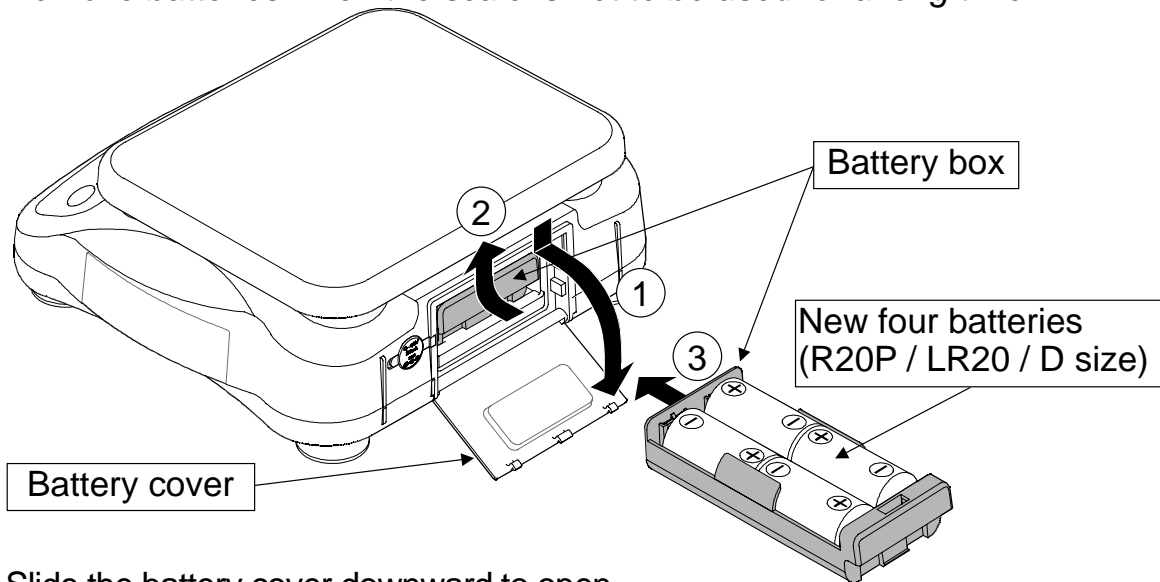


PREPARATION

Installing Batteries

⚠ CAUTION

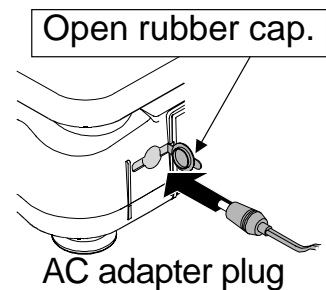
- ❑ Take great care of the polarity of batteries. The polarity marks are shown in the battery box.
- ❑ Replace used batteries with four new ones when **lb** is displayed.
- ❑ Do not mix used and new batteries. Do not mix the battery type.
- ❑ Remove batteries when the scale is not to be used for a long time.



- 1 Slide the battery cover downward to open.
 - 2 Push the battery box to unhook and pull it out.
 - 3 Insert new four batteries (R20P / LR20 / D size) into the battery box, taking extreme care of the polarities.
- ❑ Batteries are not included with shipment.

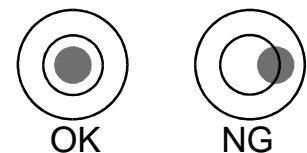
Connecting an AC adapter (Optional)

The AC input requirement could be 100, 120 or 230 volts (50/60Hz) depending on the area where used, so please verify that the adapter is correct. Open the rubber cap and plug the AC adapter.



Setting up the Scale

Place the scale on the firm surface and adjust the feet so that the spirit level shows the scale is level for an accurate weighing.



WEIGHING

Before Weighing

Automatic power-off function.

If the scale left ON and the stable indicator is displayed, an automatic power-off function turns power off after approximately 5 minutes.

To disable/enable this function, turn the scale on while pressing the [RE-ZERO] key. Then or will be displayed.

Function disabled. Function enabled.

Select the setting by pressing the [RE-ZERO] key which toggles the display above, and press the [UNITS] key. The scale shows and returns to the weighing mode.

Error message

<input type="text" value="e"/>	Overload: remove excess load on the weighing platform.
<input type="text" value="-----"/>	The scale zero is out of zero range or unstable when powered on. Make sure no load is on the weighing platform or nothing touches the platform.
<input type="text" value="lb"/>	Low battery: replace the batteries or use the AC adapter.

Calibration may be required before weighing

Read "CALIBRATION" first and if necessary, calibrate your scale for accurate weighing.

Weighing Procedures

1. Turn on the scale.

Press the [ON/OFF] key to turn on the scale. Then the scale displays all segments for a few seconds and then will be displayed.

2. Start weighing

If you do not use a container for weighing,

Verify the reading is . If not, press the [RE-ZERO] key to display . Place objects on the weighing platform to weigh. When the reading becomes stable, the stable indicator is displayed.

If you use a container for weighing,

Place an empty container on the platform. Wait for the stable indicator to be displayed and press the [RE-ZERO] key. Place the objects to be weighed in the container. When the reading becomes stable, the stable indicator is displayed.

Select the weighing unit

Press the [UNITS] key to select weighing unit either "(k)g", "lb", "oz" or "lb-oz". The scale will power up with the weighing unit that had been used when turned off last time.

CALIBRATION

When to Calibrate

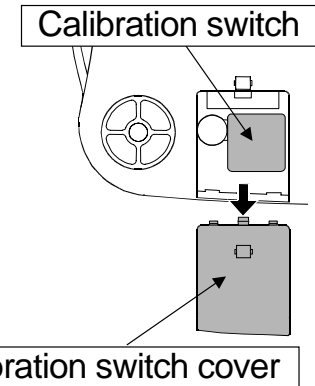
Calibration may be required when it initially installed or it is moved a substantial distance. Also periodical calibration will be recommended.

Calibration using a Calibration Weight

1. Enter calibration mode.

Press the [ON/OFF] key to turn the power off. While pressing both the [RE-ZERO] and [UNITS] keys, press the [ON/OFF] key. Cal will be displayed.

Or remove the calibration switch cover on the bottom and press the calibration switch while in the weighing mode. Then Cal will be displayed.



2. Zero calibration

Press the [RE-ZERO] key to calibrate zero. Cal 0 will be displayed. Wait for the stable indicator to be displayed and press the [RE-ZERO] key. Cal f will be displayed in a few seconds. If the zero calibration only is to be done, press the [UNITS] key. The scale will automatically return to the weighing mode.

3. Span calibration

When Cal f is displayed, place the weight at the center of the platform. Wait for the stable indicator to be displayed, then press the [RE-ZERO] key. The display will show end and the scale will automatically return to the weighing mode. See “SPECIFICATIONS” about the calibration weight.

Calibration by Gravity Compensation

The scale is calibrated at 9.798 m/s^2 at the factory. If the acceleration of gravity at your location is not same and if you do not have calibration weights, you can calibrate the scale by compensating the acceleration of gravity. (Refer “The Value of Gravity at Various Locations”.)

1. Set a new acceleration value.

When Cal is displayed, press the [UNITS] key and 9798 will be displayed. Press the [RE-ZERO] key to increment the blinking digit and press the [UNITS] key to move the blinking digit.

2. Store the value in memory.

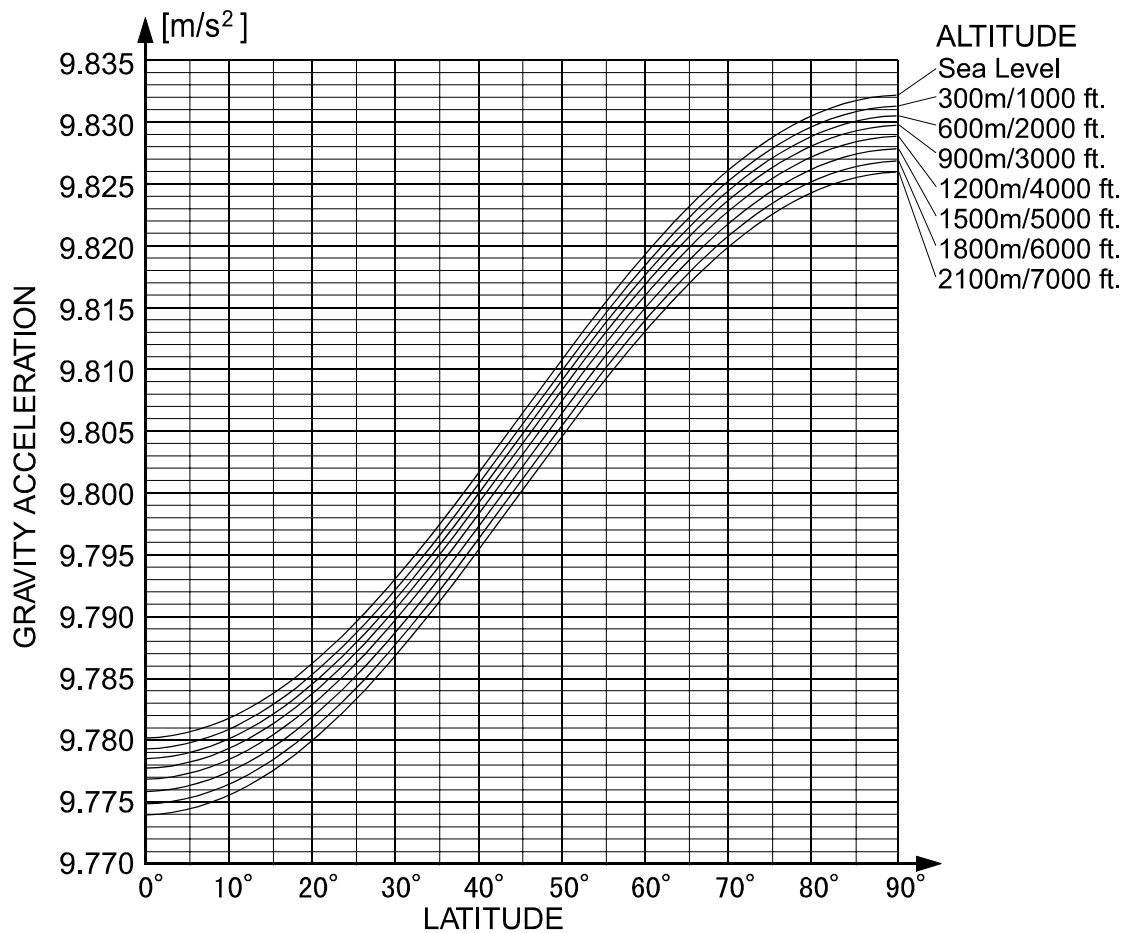
While pressing the [UNITS] key, press and hold the [RE-ZERO] key and release the [UNITS] key. Then the display will show end and return to Cal. Turn the scale off to finish the procedure.

SPECIFICATIONS

MODEL		SJ-1000H	SJ-2000H	SJ-5000H	SJ-12KH
Capacity x Resolution	(k)g	1000 g x 0.5 g	2000 g x 1 g	5000 g x 2 g	12 kg x 5g
	lb	2.2 lb x 0.001 lb	4.4 lb x 0.002 lb	11 lb x 0.005 lb	26 lb x 0.01 lb
	oz	35 oz x 0.02 oz	70 oz x 0.05 oz	176 oz x 0.1 oz	423 oz x 0.2 oz
	lb-oz	2.2 lb x 0.1 oz	4.4 lb x 0.1 oz	11 lb x 0.1 oz	26 lb x 1 oz
Non-linearity		±1 g	±2 g	±5 g	±10 g
Repeatability		1 g	2 g	5 g	10 g
Span drift		±0.015% / °C TYP (5°C~35°C / 41°F~95°F)			
Operating temp.		-10°C~40°C / 14°F~104°F, Less than 85%RH (No condensation)			
Display		25 mm / 0.98 inches, 7 segment liquid crystal display			
Display update		Approximately 10 times per second			
Power		4 x R20P / LR20 / "D" size batteries or AC adapter			
Battery life		Approximately 800 hours with alkaline cells at 20°C / 68°F			
Platform size		230 (W) x 190 (D) mm / 9.05 (W) x 7.48 (D) inches			
Dimensions		265 (W) x 250 (D) x 103 (H) mm 10.4 (W) x 9.8 (D) x 4.1 (H) inches			
Weight		Approximately 1.9 kg / 4.2 lb			
Calibration weight		1000g ± 0.1g	2000g ± 0.2g	5000g ± 0.5g	10 kg ± 1g
Accessories		This manual			
Options		AC adapter			

The Value of Gravity at Various Locations

Amsterdam	9.813 m/s ²	Havana	9.788 m/s ²	Rio de Janeiro	9.788 m/s ²
Athens	9.807 m/s ²	Helsinki	9.819 m/s ²	Rome	9.803 m/s ²
Auckland NZ	9.799 m/s ²	Kuwait	9.793 m/s ²	San Francisco	9.800 m/s ²
Bangkok	9.783 m/s ²	Lisbon	9.801 m/s ²	Singapore	9.781 m/s ²
Birmingham	9.813 m/s ²	London (Greenwich)	9.812 m/s ²	Stockholm	9.818 m/s ²
Brussels	9.811 m/s ²	Los Angeles	9.796 m/s ²	Sydney	9.797 m/s ²
Buenos Aires	9.797 m/s ²	Madrid	9.800 m/s ²	Taichung	9.789 m/s ²
Calcutta	9.788 m/s ²	Manila	9.784 m/s ²	Taiwan	9.788 m/s ²
Cape Town	9.796 m/s ²	Melbourne	9.800 m/s ²	Taipei	9.790 m/s ²
Chicago	9.803 m/s ²	Mexico City	9.779 m/s ²	Tokyo	9.798 m/s ²
Copenhagen	9.815 m/s ²	Milan	9.806 m/s ²	Vancouver, BC	9.809 m/s ²
Cyprus	9.797 m/s ²	New York	9.802 m/s ²	Washington DC	9.801 m/s ²
Djakarta	9.781 m/s ²	Oslo	9.819 m/s ²	Wellington NZ	9.803 m/s ²
Frankfurt	9.810 m/s ²	Ottawa	9.806 m/s ²	Zurich	9.807 m/s ²
Glasgow	9.816 m/s ²	Paris	9.809 m/s ²		



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