



# **OPERATION MANUAL**

PLEASE READ THIS MANUAL VERY CAREFULLY BEFORE OPERATING



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# CAUTION

Before using the scale, please adhere to the following safety guidelines:

- Verify Voltage Compatibility: Ensure the power adaptor's input voltage matches the outlet's output voltage. If not, do not plug in the adaptor; contact your dealer instead.
- Charge Before Use: For first-time use, charge the scale for at least 8 hours by plugging the main adaptor into the wall outlet.
- Retain Packing Materials: Save packing materials for future transport.
- Avoid Unauthorized Repairs: Only perform troubleshooting as listed in the TROUBLESHOOTING section; do not attempt to open the unit.
- Clean Properly: Use a soft, damp cloth and mild detergent if necessary. Avoid using harsh materials, acetone, volatile solvents, thinner, or alcohol.
- Avoid Pressurized Water: Do not clean with a pressurized water nozzle.
- Store Horizontally: During transport or long-term storage, keep the scale horizontal.
- Remove Platter for Storage: Before transport or long-term storage, remove the platter.
- Dry and Clean Storage: Always store the scale in a clean, dry place.

# SPECIFICATIONS

The SEK series electronic piece counting/check weighing scales are available in various models, each with specific capacities and divisions. The specifications for each model are provided below:

Model No.	Capacity (Max)	Division (d)
SEK-3000	3000g / 6.6lb	0.05g / 0.01oz
SEK-6000	6000g / 13.2lb	0.1g / 0.01oz
SEK-12K	12kg / 26.45lb	0.2g / 0.01oz
SEK-30K	30kg / 66lb	0.5g / 0.02oz
SEK-60K	60kg / 132lb	1g / 0.1oz

#### Power Requirements for Light Tower Connectivity

When using the SEK series electronic piece counting/check weighing scales in conjunction with a light tower for check weighing alarm functionality, please be advised of the following:

The built-in 6V 4Ah rechargeable battery in the SEK series scales is not capable of powering the light tower.

To ensure proper operation of both the scale and the light tower, the SEK series scale must be connected to an external power.

#### **Additional Specifications:**

- Max. Tare Range: Subtractive Full Tare Range
- Max. Zero Range: 2% of Rated Capacity
- Weight Units: Metric (g), Avoirdupois (e.g., pounds, ounces), Pieces (pcs)
- Operation Environment: 040°C (32104°F), with Relative Humidity ≤ 85%, Non-condensed
- Power Source: 6V 4Ah Rechargeable Battery or External Power Adaptor

**NOTE:** Depending on regional regulations and preferences, the options to weigh in Avoirdupois units and traditional Taiwanese units may be disabled on certain models. Please consult with your dealer to ensure that the scale you are purchasing supports the weight units required for your specific needs.

# FEATURES

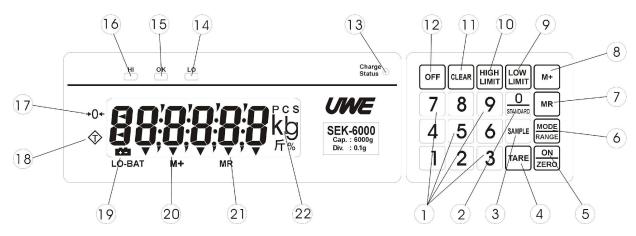
The SEK series electronic piece counting/check weighing scales are designed with the following features to provide versatile functionality:

- Manual Zero Function: Allows manual zeroing within ±2% of full scale (F.S.).
- Tare Function: Full tare functionality to offset the weight of containers or packaging.
- Selectable Resolution and Weighing Units: Choose from resolutions of 1/60,000, 1/30,000, or 1/15,000, and weighing units including grams (g), pounds (lb), pound-ounces (lb-oz), taels, or pieces (pcs).
- Low Battery Warning Indicator: An icon appears when the battery is low, prompting timely recharging.
- Backlight: For improved visibility in low-light conditions.

#### **Optional Features:**

- Rear Display: Provides additional viewing angles.
- RS-232 Interface: Allows connectivity with computers and other devices.
- Relay Output: Enables integration with other systems.

Please consult with your dealer or refer to the specific model's specifications to determine the availability of these optional features. They may be included in certain models or available as separate add-ons.



### **KEYBOARD LAYOUT & FUNCTIONS**

### **Numeric Keypad and Basic Functions**

Key Number	Кеу	Function	
1	NUMERIC KEYPAD (0-9)	Input numbers for settings (e.g., setting the HI-OK-LO values).	
2	0 / STANDARD	Input "0" in regular use. Press and hold to set the weight displayed as the OK value. The LED for OK lights up when stored.	
3	SAMPLE	Used in counting (pcs) function. Input the number of items on the platter, then press SAMPLE. The scale stores the sample weight, and the display shows the item count.	
4	TARE	Tare off the weight of the load on the platter (full tare available).	
5	ON/ZERO	Turn on the scale or manually set to zero (up to 2% of full capacity). Press and hold to turn the backlight on/off.	
6	MODE/RANGE	Change the weighing units/resolution and the range of HI-OK-LO. Press and hold to shift between units and division (e.g., $6000.1g \rightarrow 6000.2g \rightarrow 0.0000lb \rightarrow etc.$ ).	

# **Memory Functions**

Key Number	Кеу	Function		
7	MR	<ol> <li>Recall accumulated total weight or total pieces.</li> <li>Press and hold, then enter 0-9 to recall HI-OK-LO data from saved memory location.</li> </ol>		
8	M+	<ol> <li>Accumulate weight or pieces displayed into memory.</li> <li>Press and hold, then enter 0-9 following screen prompt to save HI-OK-LO data to a designated memory location.</li> </ol>		

# **Limit Functions**

Key Number	Кеу	Function	
9	LOW LIMIT	Set the LO limit for HI-OK-LO by inputting the number using the numeric keypad or placing a load on the scale.	
10	HIGH LIMIT	Set the HI limit for HI-OK-LO by inputting the number using the numeric keypad or placing a load on the scale.	
11	CLEAR	Clear previous settings for HI-OK-LO (high limit, low limit, standard, and range settings).	

# **Other Functions and Indicators**

Key Number	Key/Indicator	Function	
12	OFF	Turn the scale off.	
Note 1	Backlight Control	Backlight can be turned on/off by pressing and holding the ON/ZERO key. Auto-off after 20 seconds at zero weight, auto-on with weight.	
Note 2	Auto Zero Function	Works within 20% of the rated capacity. Remove all weight from the platter before turning on the scale.	

## **DISPLAY INDICATORS**

Indicator	Description
CHARGE STATUS LIGHT	Displays the charging status. Red during charging, green when fully charged.
LED for LO	Lights up when the weight or pieces on the scale are lower than the LO value set for HI-OK-LO.
LED for OK	Lights up when the weight or pieces on the scale are within the range of the OK value for HI-OK-LO.
LED for HI	Lights up when the weight or pieces on the scale are higher than the HI value set for HI-OK-LO.
ZERO INDICATOR	Arrow indicates a zero weight status.
TARE INDICATOR	Arrow indicates TARE function in operation; the displayed weight is NET weight.
LOW-BATTERY INDICATOR	Appears when the battery is low. Charge the scale immediately to avoid shortening battery life.
M+ INDICATOR	Arrow indicates that the accumulation function is in use.
MR INDICATOR	Arrow indicates that the accumulated data is currently displayed.
WEIGHING UNITS INDICATOR	Shows the current weighing unit employed.

## **INTERNAL FUNCTIONS**

Function	Description & Options		
FO	Set Auto Zero Tracking Range: Select how many divisions of "e" to Auto Zero. Within the setting range, the weight is forced to be zero.		
F1	Span Value Display: Displays the span value.		
F2	Software Version Display and Full Display Test: Shows the software version and runs a full display test.		
F3	Weighing Unit Selection: Select and set the default weighing unit. Enable or disable the unit by pressing the MODE key.		
F4	Auto Power Off Function: Select the Auto Power Off time (no auto power off, or auto power off after 30 minutes).		
F5	RS-232 Interface Setting: Select Baud Rate (4800, 9600, or 19200 bps) and Parity Setting (no Parity bit, Even Parity bit).		
F6	Enable/Disable Digital Filter: Select from FiLt_0 (Disable) to FiLt_5 (Enable). Higher number represents a stronger filter with more weighing stability.		
F7	RS-232 Transmission Mode: Select from Auto (Send data once), P-Out (Printer Output), or Conti (Send data continuously).		
F8	Tare Mode Selection: Choose from n_tArE (Tare function when weight is not stable) or S_tArE (Tare function when weight is stable).		
F9	Sound Alarm for HI-OK-LO: Select from nobEEP (disable), gobEEP (OK value), HLbEEP (HI/LO value), HbEEP (HI value), LbEEP (LO value).		
F10	Relay Output Mode Selection: Choose from Act L (open/close) or Act H (open/close) for relay output status.		

# **CHECKWEIGHING APPLICATION**

The SEK series scales provide a checkweighing function that enables users to define, save, and recall specific high and low weight limits. Here's how to use these features:

### Setting HI-OK-LO Limits:

High Limit: Input the desired high limit using the numeric keypad, then press the HIGH LIMIT key to save.

Low Limit: Input the desired low limit using the numeric keypad, then press the LOW LIMIT key to save.

Note: These settings are retained in the system memory even when the power is off and are separate from the SEK's 10 other memory sets.

### Managing HI-OK-LO Limit Data:

**Saving to Memory:** After setting the HI-OK-LOW limits, press and hold the M+ key, then enter a number (0-9) following the screen prompt. This will save the data to a specific memory location.

**Recalling from Memory:** Press and hold the MR key, then enter the corresponding number (0-9) following the screen prompt. This will recall the HI-OK-LO data from the saved memory location.

By integrating these features, the SEK series scales offer enhanced flexibility for applications that require consistent weight monitoring against predefined limits.

### TROUBLESHOOTING

Should you encounter any difficulties while using the SEK series scale, please refer to the following troubleshooting guide. If the problem persists, contact your dealer or authorized service provider.

Syndrome	Possible Cause	Solution
Scale cannot be turned on	1. Adaptor not plugged correctly.	1. Re-plug the adaptor.
	2. Rechargeable battery has low battery.	2. Recharge the battery.
	3. Adaptor voltage incompatible with electrical outlet.	3. Replace the adaptor with the correct voltage.
Scale turns off automatically after a while.	Auto Power Off function is in operation.	Enter function F4 and change the setting.
Scale display shows a low battery symbol.	Low battery warning.	Recharge the battery.

Weight is not accurate.	1. Object stuck on the scale.	1. Remove the object and try again.
	2. Outside interference such as wind or RF interference.	2. Move to an environment free of interference and try again.

Note: This troubleshooting guide covers common issues and resolutions. For specific concerns or more complex problems, refer to the detailed manual or contact your authorized service provider.

# CALIBRATION

Step	Action	Display	Notes
1	Press ON/ZERO to turn on the scale. Hold MODE/RANGE during countdown.	"CAL.?_1"	Initiates calibration mode.
2	Press MODE/RANGE.	"YES"	Confirm zero point with no loads on the platter.
3	Wait for zero point calibration.	"LOAD" "XXXX.X"	Place a weight marker corresponding to the weight shown on the display.
4	Complete first point calibration.	"CAL.?_2"	Press ON/ZERO to exit or repeat steps 3 and 4 for second point calibration if needed.
5	(Optional) Calibrate second point.	"LOAD" "XXXX.X"	Repeat step 3 if second point calibration is needed.
6	Finish and return to weighing mode.	Normal Display	Scale is now calibrated and ready for use.

**Note:** Use only calibrated weights for this procedure. Incorrect calibration can lead to measurement errors.