ACS-SU
Operation Manual

Contents subject to change without notice

Version 1.0
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General Information

- Read and understand all operating instructions before using this product. Keep this manual for future reference.
- Don't use sharp objects to operate the keyboard. The waterproof membrane may become damaged.
- Record the weight shortly after loading the platform. After extended periods, the load cell's output signature may result in a less accurate reading.
- Place the scale on a hard, flat surface. Locate the leveling bubble and adjust the base feet as needed to ensure the scale is level before using.
- Avoid extended exposure to extreme heat or cold. Optimum operation is at normal room temperature. Allow the scale to acclimate to room temperature before using.
- Allow sufficient warm up time. Turn the scale on and allow up to 2 minutes for internal components to stabilize before weighing.
- Electronic scales are precision instruments. Do not operate near cell phones, radios, computers or other electronic devices that emit radio frequencies that may cause unstable readings. If the scale performs poorly, try moving to a different room or location.
- When storing the scale for extended periods, the battery must be charged every 90 days to avoid premature performance degradation. Over time, the operating time per charge will degrade. If the operating time is no longer acceptable, the battery must be replaced.
- Avoid using in heavy vibration or heavy airflow conditions.

Specifications

Model	ACS-SU-3	ACS-SU-6	ACS-SU-15
Max Capacity	6.6 lb (3 kg)	13.2 lb (6 kg)	33 lb (15 kg)
Readability	0.001 lb (0.5 g)	0.002 lb (1 g)	0.005 lb (2 g)
Divisions	6000	6000	7500
Construction	ABS plastic housing, stainless steel pan		
Waterproof Rating	IP68		
Weighing Units	kg, g, lb, lb:oz, pcs		
Modes	Weighing, counting, checkweighing		
Working Temp	25°F to 95°F (-5 to 35°C)		
Storage Temp	-10°F to 120°F (-25 to 50°C)		
Power	6V 3.8mAh Ni-MH battery or AC power cord		
Max Tare	100% Max capacity		
Platform Dimensions	9" x 7.5" (230 x 190mm)		
Base Dimensions	11.3" x 9.3" x 4.3" (L x W x H) 287 x 236 x 110mm (L x W x H)		

Contents

- Scale
- Owner's manual

Function Keys

(OFF)	Power off	(ON/ZERO)	Power on and zero
(SET 0~9)	Sets parameters and input data	(TARE)	Tare key

Normal Weighing Mode

1. Place the scale on a flat, stable surface. Level the scale using the leveling bubble.
2. Power on the scale by pressing the ON/ZERO key. There will be an audible tone, the firmware version will be shown, and the display will count down from 9 to 0.   When the **ZERO** light is lit, the scale is ready for use. If the **ZERO** light is not lit, press the ON/ZERO key again to zero the scale.
3. To change the weighing unit of measure, see **User Setup** instructions.
4. Set tare if desired.
5. Place objects on the scale platform and read the weight on the indicator.
6. When finished weighing, press the OFF key.
   Note: To save battery power, the scale has two power saving features:
      a. **Power Saving Mode**: The display will darken after 40 seconds with no weight on the platform, but the scale is not off. Adding weight to the platform will automatically turn the display back on.
      b. **Auto Off**: Scale will automatically turn off after 10 minutes with no key activity or weight change.
   Note: If the battery voltage falls below 5.6V, the scale will automatically power off.

Setting the Tare Weight

1. Place an empty container on the platform and press the TARE key. The display will return to zero, eliminating the weight of the container. The **ZERO** light will go off and the **TARE** light will be lit.
2. Put the material or objects to be weighed in the container. The net weight will be displayed.
3. To exit tare mode, remove all weight from the scale. The display will show a negative weight. Press the TARE key to return the display to zero, eliminating the weight of the container. The **TARE** light will go off and the **ZERO** light will be lit. If the **ZERO** light is not lit, press the ON/ZERO key to zero the scale.

Adjusting the display brightness

1. From normal weighing mode, press the ON/ZERO key for 3 seconds.
2. The default setting of "**LU-1**" will be displayed. Press and release the SET/0~9 key to cycle through **LU-0** to **LU-3**, where **LU-3** is the brightest setting. **LU-1** is recommended to maximize battery life.
3. Press the TARE key to select and return to normal weighing mode.

Check Weighing (Data Compare) Mode

The check weighing or data compare function allows the user to input a pre-set range, and the display will indicate whether the weighed value is within that range, or indicate if it is too high or too low.

1. From normal weighing mode, press the SET/0~9 key for 3 seconds to enter **Setup** mode.
2. Press and release the SET/0~9 key to cycle through the parameters until "**rAngE**" is shown. Press the TARE key to confirm.
3. Press the SET/0~9 key to until "**on**" is shown. Press the TARE key to confirm.
4. The previously used lower limit value will be displayed with the first digit flashing and the **Under** light flashing. Enter the lower limit of the checkweighing range using the SET/0~9 key to increase the flashing digit and the TARE key to accept a digit and move to the next position.
   Note: The decimal does not appear on the display when entering limit values, but the value should be entered as if it did appear. For example: A lower limit of 2.55 pounds should be entered as 02550 on the display.
5. The previously used upper limit value will be displayed with the first digit flashing and the **Over** light flashing. Enter the upper limit of the checkweighing range using the SET/0~9 key to increase the flashing digit and the TARE key to accept a digit and move to the next position. After the last digit has been entered, the scale will return to weighing mode and checkweighing may begin.
   Note: The upper limit must be larger than lower limit. If it is not, "**oFF**" will be displayed and the scale will return to the normal weighing mode and checkweighing will be deactivated.
6. Place objects on the scale platform. The weight will be shown on the display. If the weight is within the specified range, the **Accept** light will be lit and an audible tone will sound. If the value is outside the specified range, the **Over** or **Under** light will be lit with no audible sound.
   Note: The audible tone parameter can be changed from its default within **User Setup** mode.
   Note: If the weight has not stabilized, no lights will be lit.
7. To turn off the checkweighing function, enter **Setup** mode following steps 1-3 above and change the setting to "**oFF**".

Counting Mode

The counting function calculates and displays the piece quantity of the load that is being weighed.

1. From normal weighing mode, press the SET/0~9 key for 3 seconds to enter **Setup** mode.
2. Press and release the SET/0~9 key to cycle through the parameters until "**UnItS**" is shown. Press the TARE key to confirm.
3. Press the SET/0~9 key to until "**PcS**" is displayed. Press the TARE key to confirm. The **pcs** light will be lit.
4. If a piece-weight has been entered previously, it will be shown. If no piece weight exists in the scale's memory, the **pcs** light will flash. To use the existing piece-weight, skip to step 7 below to begin counting items. To enter a new piece-weight, follow steps 5 and 6.
5. While in counting mode, press and hold the ON/ZERO key until the word "**COUnt**" is displayed briefly. Then the **pcs** light will flash and "**0**" will be displayed.
6. Place a known quantity of items on the scale platform and press the TARE key. "00000" will be displayed with

Counting Mode (cont'd)

the first zero digit flashing. Enter the quantity of items using the SET/0~9 key to increase the flashing digit and the TARE key to accept a digit and move to the next position. After the last digit is entered, the scale calculates the piece-weight and displays the count on the scale

Note: Piece quantity must be between 1 and 30,000.

7.   Begin weighing. The piece count will be displayed, but the weight will not.
8.   To change the piece count, repeat steps 5 and 6.
9.   To turn off the counting function, follow steps 1-3 above and change the setting from "**pcs**" to a unit of weight.

Calibration Mode

Note:
 - **A standard calibration weight of 100% of the scale's rated capacity is required.**
 - **The calibration operation must be in Kg or g.**
 - **There is a seal on the underside of the scale. Removing the seal is necessary to perform a calibration, but doing so void the manufacturer's original calibration.**

1. Power off the scale
2. Turn the scale upside down, remove the seal, and use a small screwdriver to remove the two screws holding the calibration switch cover. Move the calibration switch to the ON position (toward the front of the scale).
3. Place the scale on stable, level surface and press the ON/ZERO key to turn the scale on.
4. After the self-check is complete, press and hold the TARE key until "**CAL**" is briefly displayed, followed by "**0**".
5. With the platform empty, press the TARE key to set the zero point. "H9" for Kg or "9" for g will be displayed.
6. Toggle to Kg or g depending on your choice of calibration weight using the SET/0~9 key. When the desired unit of measure is displayed, press the TARE key to confirm. The full capacity will flash.
7. Place the calibration weight onto the scale platform and press the TARE key.
8. "**CAEnd**" will briefly be displayed and then return to normal weighing mode.
9. Power off the scale, return the calibration switch to the OFF position, and replace the calibration switch cover.
   Note: If the display shows "Err-0" after power up, there is a problem with calibration. Repeat the calibration process.

User Parameter Setup Mode

1. From normal weighing mode, press the SET/0~9 key for 3 seconds to enter **Setup** mode.
2. Press and release the SET/0~9 key to cycle through the parameter modes listed below.
3. To enter a parameter mode, press the TARE key.
4. Within a parameter mode, press the SET/0~9 key to cycle through the options for that setting.
5. Press the TARE key to select the setting and to exit setup mode.

Parameter	Default	Setting
rAngE	oFF	Activate checkweighing function: • on = Activate the checkweighing function and enter range limits • oFF = Deactivate the checkweighing function
UnItS	Lb.Lb	Select the unit of measure: • H9 = Kg • 9 = g • Lb.Lb = Pounds • Lb.oZ = Pounds/ounces • PcS = Counting mode (piece count will be displayed; weight will not) **Note**: Calibration must be done in Kg or g
A- oFF	y	Auto off mode: • n = No auto power off • y = Auto off after 10 minutes of no operation or weight change
FILtX	FILt3	Display response speed: • FILt1 = one step to display • FILt2 = 3-4 steps to display • FILt3 = 6-8 steps to display • FILt4 = display is fast
ZEro	1d	Set auto-zero range: • 0.5d • 1d • 1.5d • 2d • 2.5d • 3d • 3.5d • 4d • 4.5d • 5d Where "d" is the readability. See Specifications.
bUZZEr	on	• on = Audible tone is on • oFF = Audible tone is off
D	See specifications	Change divisions: (**This setting should not be changed**) • If this mode is entered accidentally, refer to the specification chart for the divisions for your scale. Press the SET/0~9 key to choose the default division setting and press the TARE key to confirm and exit.
d-dP	y	Dual display mode: • n = front display only • y = front and rear display

Battery and Charging

There are three battery indicators on the display.

High = Battery voltage is greater than 6.3V

Mid = Battery voltage is between 6V and 6.3V

Low = Battery voltage is lower than 6V

Note: If the battery voltage falls below 5.6V, the scale will automatically power off.

Power is supplied by an internal rechargeable 6V Ni-MH battery (3800 mAh). When "**-bAtLo-**" is displayed, the battery must be recharged. Plug in the AC power cord to recharge the battery. Full charging time is approximately 10-12 hours. The scale may continue to be used on AC power during charging.

Battery life and recharge time will vary with use. Over time, the operating time per each full charge will degrade. If the operating time is no longer acceptable, the battery must be replaced. When storing the scale for extended periods, the battery must be charged every 90 days to avoid premature performance degradation.

Character Prompt Definitions

dc x.xx	Battery voltage is x.xx volts
------	Scale capacity has been exceeded. Reduce the weight on the platform.
-AdC-	Analog/Digital converter overflow. Remove weight, zero the scale, and try again.
bATLo	Battery is low and should be charged soon
c _End	Battery recharging is complete
Err-0	Scale has been overloaded. Remove weight, zero the scale, and try again. If error code persists, loadcell has been damaged. Loadcells are not replaceable by the user. Contact the manufacturer at www.measuretek.net.

Replacement Parts

Part Number	Description
MH12R99001G	6V 3.8mAh Ni-MH battery

One Year Limited Warranty

MeasureTek products covered in this manual are guaranteed to be free from defects in material and workmanship for a period of one year after date of purchase. Misuse, accidental damage, overload, alteration, and improper installation are expressly excluded. Any product which is determined to be defective in material or workmanship within this time period may, as the exclusive remedy, be returned to an authorized MeasureTek distributor or service center, freight prepaid with prior return authorization, to be repaired or replaced at the manufacturer's option. MeasureTek's liability under this warranty is limited to the repair or replacement of the defective product and in no event shall MeasureTek be liable for consequential or indirect damages.