



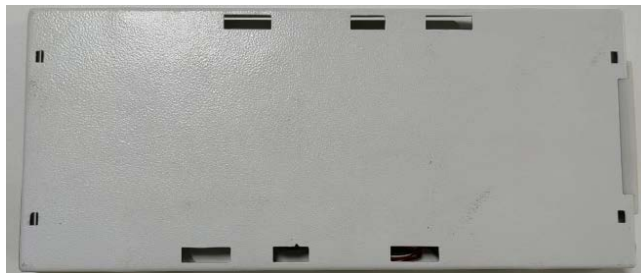
AITA Surface

Installation Guide

12/28/2023

1) Parts List

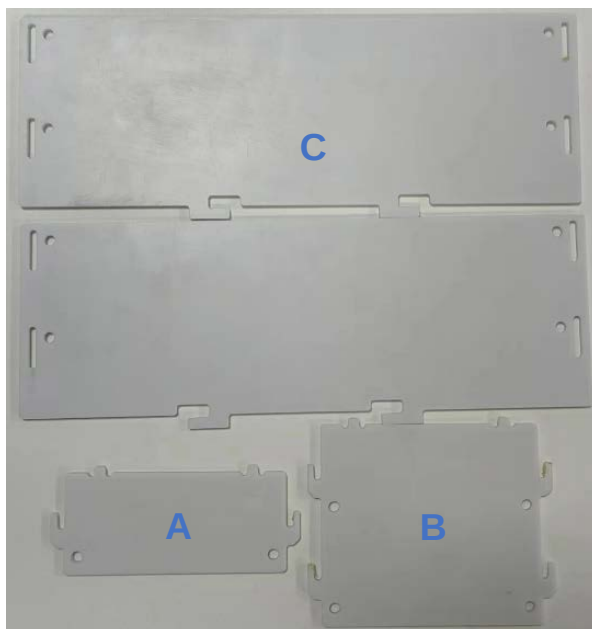
- a) Scale body – 1 piece



XS Size Shown

- b) Bin Walls – 4 pieces

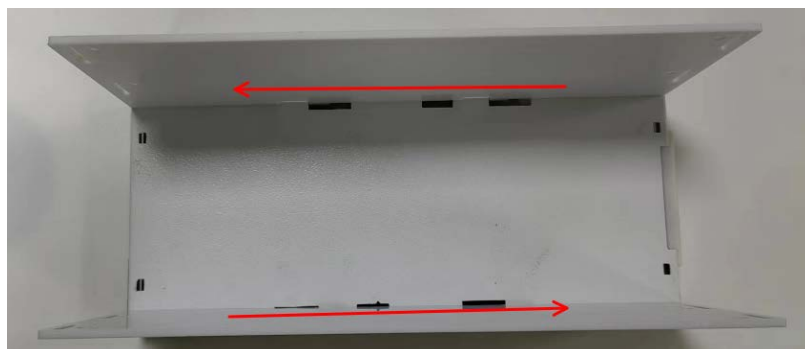
- i) Front Wall (A) – 1pc
- ii) Back Wall (B) – 1pc
- iii) Side Wall (Left & Right interchangeable) (C) – 2pcs



2) Bin Install

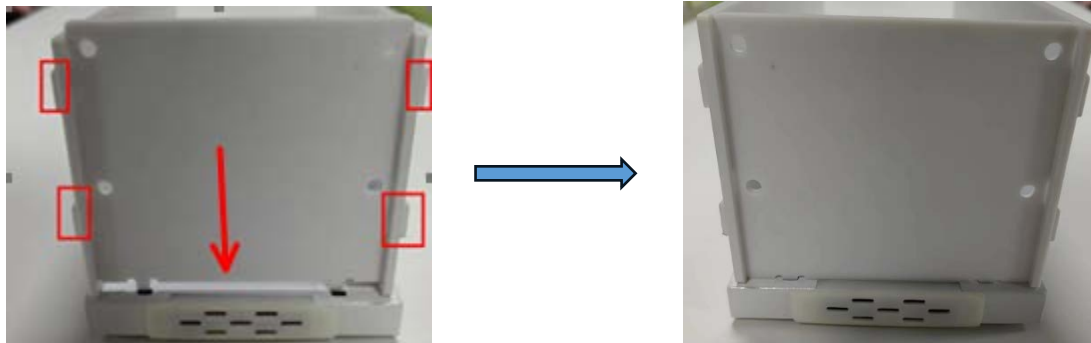
- a) Install the left and right walls

Insert the 3 buckles on the left and right walls into the three slots on the scale body, pushing them to the left/right. Align the left and right walls with the left and right sides of the scale, as shown in the following figure.

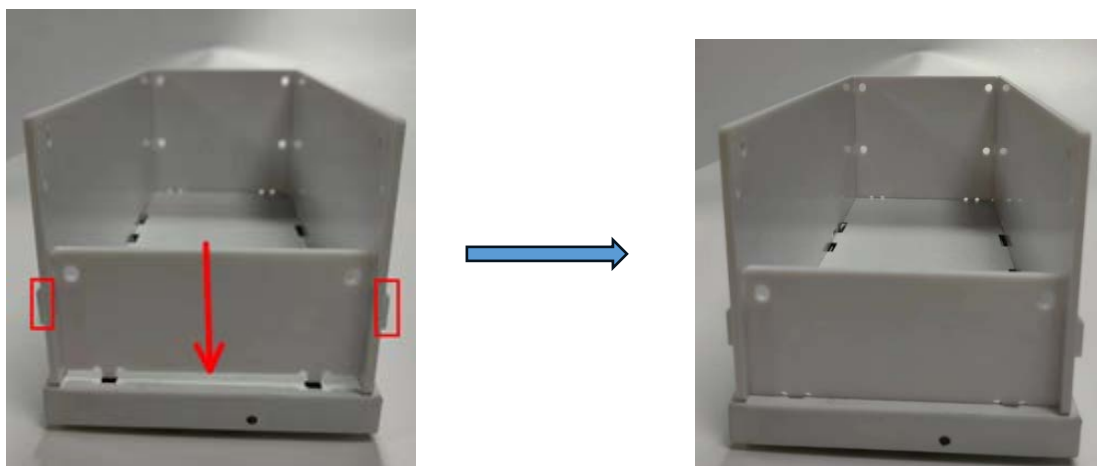


b) Install the front and rear walls

Insert the teeth on both sides of the front/rear walls into the holes on the left and right slotted cut-outs. Then, push the front/rear walls down, as shown in the figure below (note: the LED light is on the front of the unit).



Rear wall installation

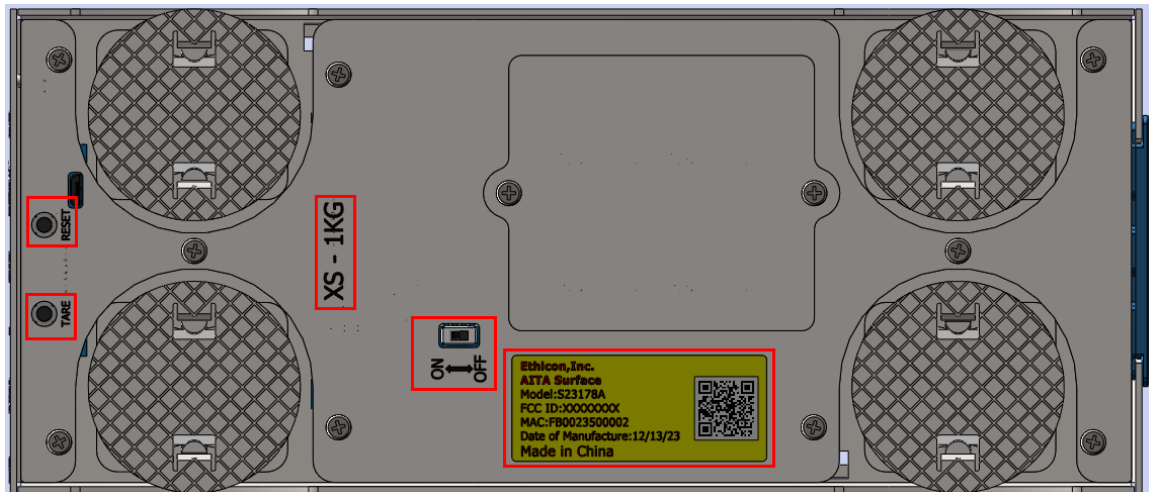


Front wall installation

3) Labels and Buttons

On the bottom of each Surface unit, the following labels and buttons can be found:

- a) TARE Button
- b) Reset button
- c) Size and weight range label
- d) Power On/Off Switch
- e) Label containing MAC address and other related product information on the bottom of the scale



a) TARE button: Used for waking Surfaces and zeroing weight

Wake up: Pressing the TARE button can wake up the dormant Surface unit.

Zeroing function: The zeroing function should be used when there is no product on the scale but there is weight data displayed. Alternatively, if the bin walls or other containers are placed on the weighing platform, the weight of the container needs to be removed. To remove the weight of the bin walls or other container, a taring function is required.

Zeroing operation: Press and hold the TARE button for 3 seconds, until the green LED light begins flashing. Quickly (within 10 seconds) place the scale unit on a steady, flat surface. The unit will then tare automatically – resetting the weight reading to zero.

b) RESET button: Used for restarting.

c) XS-1KG: Scale size and maximum weighing range of Surface scales .

d) ON/OFF: Turning on and off Surface scales.

e) Mac address label: Product related information for surface scales.

4) Battery Replacement

Tools needed: Phillips head screwdriver and flat head screwdriver

Operation

a) Remove the battery cover

As shown in the figure below, use a Phillips head screwdriver to remove the two screws at the bottom of the scale body.



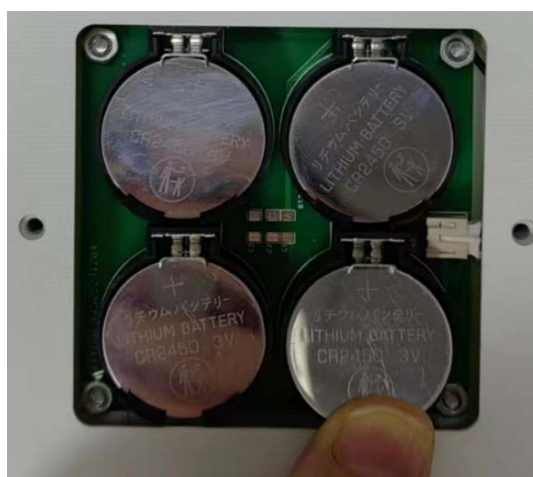
b) Battery removal

As shown in the figure below, remove the battery cover to reveal 4 batteries. Insert a flat screwdriver into the spring clip of the black battery holder, and gently pry upwards to remove the batteries.



c) Battery installation

The side of the battery with text indicating 3V+ should face upwards. First, insert one end of the battery into the spring clip, and then press the opposite end with a finger to insert it as shown below.



d) Replace the battery cover

Align the battery cover with the screw holes and tighten the screws to complete the installation.

5) Log Explanation

- a) Maximum of 10 error logs, with cyclic coverage.
- b) ERROR: Instruction number 1 byte+record data length 1 byte+error code
- c) Time: The time between each error occurrence and the last startup
- d) Error code specification

Error Code specification		
serial number	Error Code	explain
1	00	normal
2	01	overload
3	02	Bluetooth reply timeout rebooted
4	03	overload and Bluetooth reply timeout rebooted
5	04	Surface rebooted
6	05	overload and Surface rebooted
7	06	Bluetooth reply timeout rebooted and Surface

6) Gateway Deployment and Surface Configuration

After turning on the Surface, place it on a platform within a radius of 30 meters from the gateway. Schedule the broadcast quantity information on the Surface scale and wait for the gateway's command. The testing method is as follows:

- a) For gateway deployment, please refer to the document "G1-E-Configuration Guide-AITA".
- b) Please refer to the file "Test Steps MQTT.md" for the usage method of MQTT assistant.
- c) Please refer to the video "Gateway Deployment and Surface Scale Information Configuration Example" for actual usage videos.
- d) Please refer to the video "Gateway Deployment and Surface Scale

Information Configuration Example" for actual usage videos.

7) Maintenance Management

- a) Handle materials with care and avoid exceeding the range of measurement, otherwise the Surface may be damaged or the weighing data may be inaccurate.
- b) The four feet of the Surface are simultaneously on a horizontal plane. The weighing feet cannot be suspended.
- c) The edges and top of the surface scales should not touch other objects. Materials should not be too large, exceeding the surrounding area of Bin. Materials should not be stacked too high and touch the upper shelves, otherwise it will lead to inaccurate weighing.
- d) Work environment precautions: Avoid air conditioning or fans blowing on the surface scales and try to avoid abnormal vibrations and shelf shaking. Wind and vibration can cause unstable weighing values.
- e) Regularly check the battery level: The surface scale will report the battery level every time it broadcasts, and a low battery reminder will be reported when the battery level is below 10%.
- f) Regularly check the accuracy of weighing: refer to section 6 above.

8) Troubleshooting

Surface Fault List		
S/N	Fault issues	Solution
1	Inaccurate weighing	1. Calibration: Refer to point 6, step 3 of the On site Application Guide. 2. Check the working environment: Is there any air conditioning wind, abnormal vibration, and shelf shaking.
2	Weighing value jumps	1. Check the working environment: Is there any air conditioning wind, abnormal vibration, and shelf shaking.

3	Overweight	1. Reduce weighed items. 2. Check if the sensor is damaged: refer to the guide and test the weighing reading. If there are no items, it still shows as overweight, indicating that the sensor is damaged.
4	No communication	- Reset: Press the RESET button once. 2. Check the antenna: visually inspect whether the antenna is detached or has other abnormalities. 3. Replace the battery.
5	Not turning on	Check the battery.

9) FCC Classification

Each model of the AITA Surface has FCC Certification, as detailed below.

Product Name (Weight/Size)	AAI Item #	FCC Name	FCC ID
Very Light - XS	S23178A	AITA Surface S1	2BA5X-S2317X8X-S1
Very Light - Small	S23179A		
Light - XS	S23178B	AITA Surface S2	2BA5X-S2317X8X-S2
Light - Small	S23179B		
Light - Medium	S23180A		
Light - Large	S23181A		
Middle - XS	S23178C	AITA Surface S3	2BA5X-S2317X8X-S3
Middle - Small	S23179C		
Middle - Medium	S23180B		
Middle - Large	S23181B		
Heavy - Small	S23179D		
Heavy - Medium	S23180C		
Heavy - Large	S23181C		
Very Heavy - Small	S23179E		
Very Heavy - Medium	S23180D		
Very Heavy - Large	S23181D		

FCC ID:

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.