Adam-b-2th-box
User Manual V1.0

Contents

1.0 Introduction

The Adam-b-2th-box is an analog digital converter. It collects the signal from load cell and then change it into the weighing digits. The digits can be transfered to the APP of the mobile phone or IPAD via Bluetooth or USB cable. The data can be stored, analyzed and managed by the APP. It can collects the digits in a speed way. And the digits are very accurate and reliable.

NOTE：

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.

changes or modifications not expressly approved by the party responsible for compliance could void the user’ s authority to operate the equipment.

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.

2.0 Notice

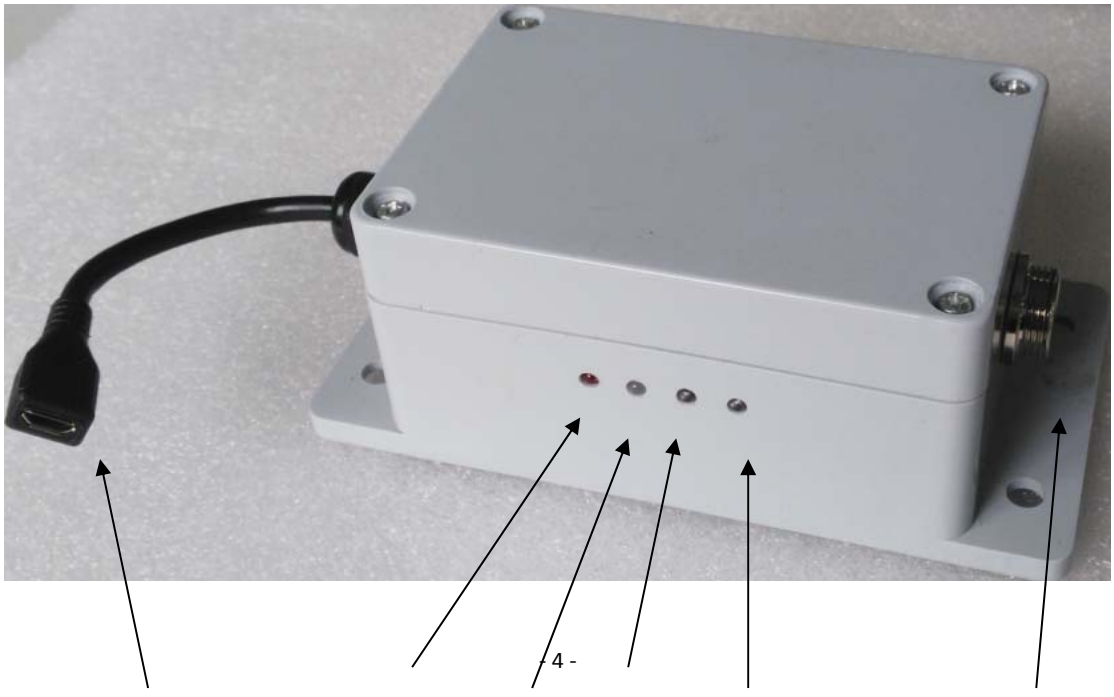
1. Do not place the box in metal or other shield environment to avoid communication stability.
2. Keep the terminal device and the box in a effective distance which is best to be within 10m.
3. Pay attention to the indicator lights when using, especial the light of

communication.

4. The adapter should be the one provided with the box to avoid damage the box because of the too high voltage. The output voltage is 5V.
5. Do not use it in the place where the water can pour on.

3.0 Instructions

3.1 Appearance



1 2 3 4 5 6

1). Micro USB: for power supply and USB function

2). Bluetooth working light: it will flash when the Bluetooth is working.

3). Power supply indicator light: power is on

4). Data connecting light: It will be on when the box receive the data.

5). Data receiving and sending light: It will flash quickly when the data is communicating to the device.

6). 8 pin load cell connector: connecting the load cell.

3.2 Operations

1. Connecting via Bluetooth

Connecting the Adam-b-2th-box with load cell by 8 pin load cell connector and and power supply, the power supply indicator light will be on. And it will enter the starting mode. The Bluetooth light will flash after 10s, which means the Bluetooth function starts and is connecting the terminal device. Now open the APP weighing software on the terminal device to set the Bluetooth function. When the box connects with the APP, the data connecting light is on. And then you can use the box normally.

Please pair the device as per following procedures:

- Open the management software.
- Search for the device
- Selecting the device named “WINNOW-XXXX” and select the option to pair.

2. Connecting via USB

Connecting the Adam-b-2th-box with load cell by 8 pin load cell connector and the terminal device by micro USB. The power supply is from the terminal device. The power supply light will be on. And it will enter the starting mode. Now open the APP weighing software on the terminal device to set the USB function. When the box connects with the APP, the data connecting light is on. And then you can use the box normally.

Note: For how to use APP software, please see the APP user manual.

4.0 Specifications

Serial Connections	Bluetooth (Classic) & USB
Communication Distance	10-20m
Division	above 1/15000
Input Signal	-15mv~15mv
IP Class	IP65
Power off Warning Time	5s
Power supply	DC5V/1A
Dimension	13.3*6.8cm
Net Weight	190g

5.0 8 Pin Load cell Connection

Pins	**Functions**
1	load cell signal- S-
2	load cell signal+ S+
3	load cell GND E-
4	load cell VDD E+
5、	shield cable
6、7、8	space

6.0 Communicating

6.1 Communicating

It can send 10 groups of data every one second. Each group is terminated by a carriage return （"\r\n"）.

For example:
>A72,G0N0S
>G100N100

Each string contains markers indicating the nature of the following features:

The **character** ＞ at the beginning of the line indicates that this is a weight of reading.

G0N0S is indicating that the gross weight is 0, net weight is 0 and the scale is stable.

G100N100S is indicating that the gross weight is 100, net weight is 100 and the scale is stable.

There are 4 possible variables that may be indicated in normal mode operation:

- **Gross weight G**: The digits directly following a G indicate gross weight in grams. Maybe + or - .

- **Net weight N**: The digits directly following an N indicate net weight in grams. May be + or -.

- **Alter-weight A**: The digits directly following an A and preceding indicate an alter weight. An alter- weight indicates the direction of an unstable vector from the current filtered reading.

- **Stable S**: The presence of S indicates the current the filtered reading is stable.

6.2 Commands

1). Zero
Write to serial: Z\r\n

2). Calibrate (unit: g)
Write to serial: C5000\r\n

3). Tare
Write to serial: T\r\n

4). Pause
Pause Bluetooth box output
Write to serial: P\r\n

5). Ticks to publish

Set the interval between each publish line (eg. To set to 5)
Write to serial: B5\r\n

6). alter threshold
Set threshold in grams above which differences between filtered and unfiltered reading will cause an alert. (eg. To set to 20)
Write to serial: A20\r\n

7). Filter
To set the filter to one of the following:
Options:
0 - FIR 7 filter
1 - FIR 13 filter
2 - FIR 37 filter
3 - naive mean filter
4 - naive mean filter
(eg to set to 0) Write to serial: F0\r\n

8.) Granularity
(eg. to set to 20)
Write to serial: G20\r\n

9). Stickiness
(eg. To set to 0.8)
0.8\r\n

10). Stable window
(eg. To set to 5)
Write to serial: L5\r\n

11). Reset
Write to serial: R\r\n

12). Status
Prints the state of all interval variables to serial out, one per one line.
Write to serial: S\r\n

7.0 Error Messages

Error Description	Possible Causes	Solutions
Unstable reading	1. load cell connector is loose.	1. Re-connect it.

	2. Something others on the pan. 3. load cell problems.	3. Remove it away. 3. Check the load cell to see if it is damaged. If yes, please replace it.
Unstable Communication	Communication distance might be too far.	Please make sure if the communication distance is too far.
Indicator light off	Adapter problem	Check if the adapter is damaged. If yes, please replace it.