

# **User Manual**

# **Wireless Platform**

# **TM**

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## Table of Contents

1. Appearance.....	2
2. Power Supply.....	2
3. Aviation Connector PIN.....	2
4. Before Use.....	3
5. Use TM With GoW/QoW.....	3
6. Use TM With APP.....	3
6-1. Pairing For The First Time.....	3
6-2. Calibration.....	4
7. Key Description.....	7
8. Other Functions.....	8
8-1. Delete The Device.....	8
8-2. Change The Device Name.....	9
8-3. Reading Specification Parameter.....	9
9. Ouput Format Under Pairing Mode In Excell Format.....	10



# 1. Appearance

A. Standard, Internal antenna

B. Option, External antenna



## LED description

Calibration LED	Link/Pair LED	Low Power/Charging LED
LED on→Start to calibrate	LED on →Linking	Red→Low power
LED flashing→Calibrating	LED flashing→Pairing	Green→Charging
LED off→Exit calibration	LED off→Not linked/paired	(Power on and Plug in)LED off→Fully charged

## Keys description

**Calibration:** Hold [Calibration] key until calibration LED flashing and then proceed to calibrate.

**Re-pairing/Clear:** Hold [Re-pairing/Clear] key until Link/Pair LED flashing and then proceed to pair.

If pairing and calibration always fail for unknown reasons, please clear EEPROM:

Hold [Re-pairing/Clear] key and power on TM. Hold it until Link/Pair LED on for 3 sec and then off.

Release [Re-pairing/Clear] key and Link/Pair LED flashes once to indicate that EEPROM has been cleared and return to the default settings.

# 2. Power Supply

## Power selection and consumption

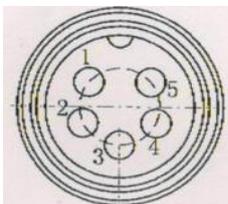
- ① Lithium battery: DC 3.7V / 1500mAh
- ② Adapter: Input: 100~240VAC (50~60Hz) Output: 12VDC 1A
- ③ 

Status	Power consumption	Battery life
Working	About 38 mA	About 70 hours
Standby	About 1mA	About 1600 hours

## Low Power Warning

When Low Power/Charging LED becomes red, please charge immediately.

# 3. Aviation connector PIN



1	E+
2	E-
3	S+
4	S-



## 4. Before Use

- ❶ Ensure TM is powered on
- ❷ Ensure the antenna has been installed
- ❸ Ensure TM has connected to load cell or platform

## 5. Use TM with GoW/QoW

### ➤ Pairing/Calibration

- ❶ Hold [Re-pairing/Clear] key until Link/Pair LED flashing.
- ❷ Press [Net] and [ON/OFF] keys together to enter self test mode. Press [Zero] or [Unit] key to select "06RePr" and then press [Tare/PT] key to pair. Link/Pair LED always on means pairing is successful, otherwise repeat❷.
- ❸ Setting external AD value: Press [Zero] or [Unit] key to select "00 ESC" and then press [Tare/PT] key to exit. Press [Net] and [Zero] keys together to enter external function setting. Select [03 RS1] → [RS1 14]→[ExtAD]. Power off and press [Net] and [ON/OFF] key together to enter self test mode. Select [01 ADC] and press [Tare/PT] key to see whether TM and GoW/Qow connected. AD value changes follow the weight change which means they are connected.
- ❹ Specification Setting (See Specification Setting in GW/QW manual) After performing specification setting, it will default to use internal AD. Please repeat 3 to set to use external AD.
- ❺ Weight calibration (See Weight calibration in GW/QW manual).
- ❻ To end calibration mode, press [Calibration] key for 3 secs until calibration LED off.

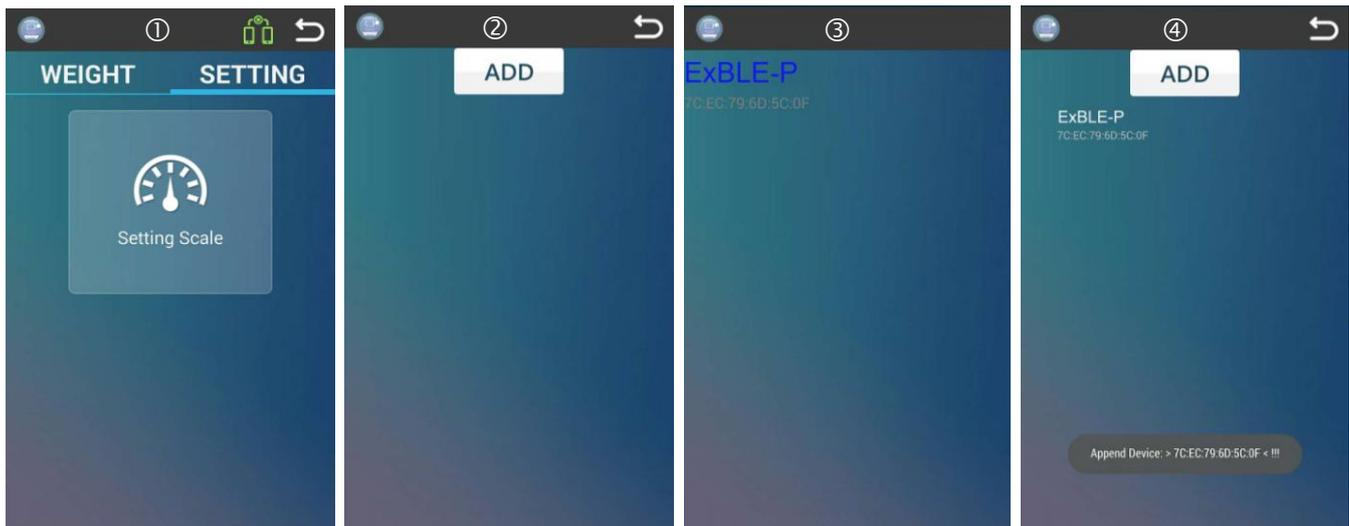
## 6. Use TM with APP

### 6-1. Pairing for the first time

1. Hold [Re-pairing/Clear] key until Link/Pair LED flashing.
2. Add device

Run the APP and select [SETTING] menu

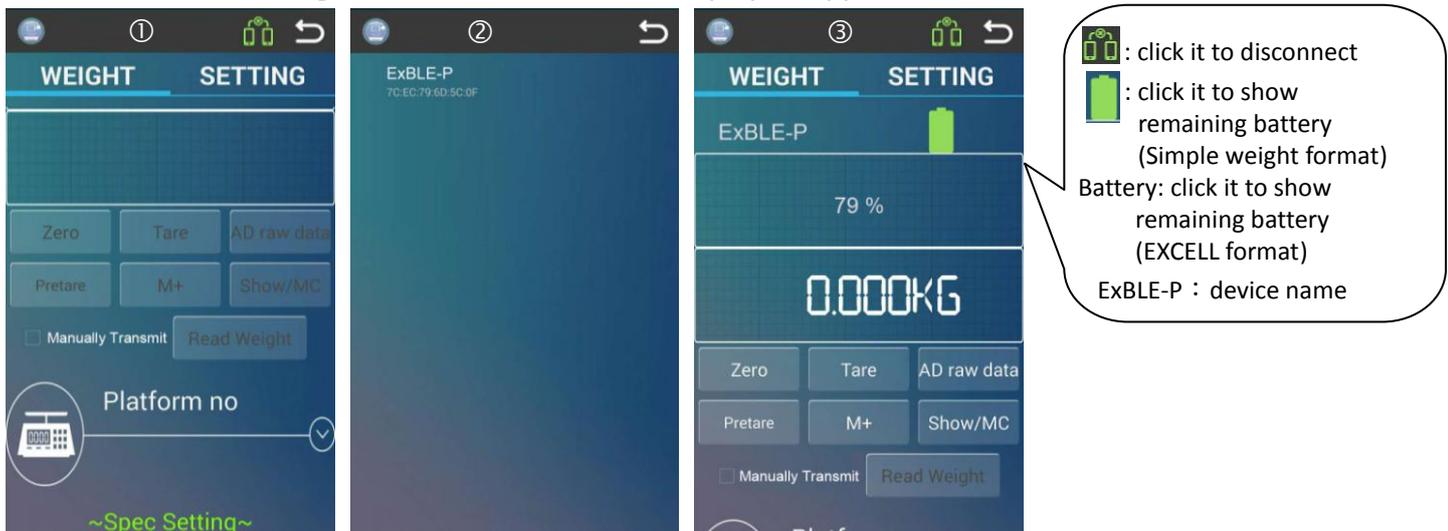
- ❶ Click [Setting Scale] and enter add device page.
- ❷ Click [ADD] to add new device and Bluetooth starts scanning for new device.
- ❸ Click the desired device to add.
- ❹ Return to add device page and the new device is added to the list while its MAC address appear the bottom.



### 3 . Connect the Device

Run the APP and select [WEIGHT] menu

- ❶ Click [Platform no] to enter device list.
- ❷ Click the device to be connected.
- ❸ Once connected, weight value and device name display on app.



4. Link/Pair LED always on means pairing is successful. It is not need to re-pair for next start. If connecting TM with other new android device, please repeat 1~4.

5. After connecting, " NO CAL" shows up that means no calibration data. Please calibrate.

## 6-2. Calibration

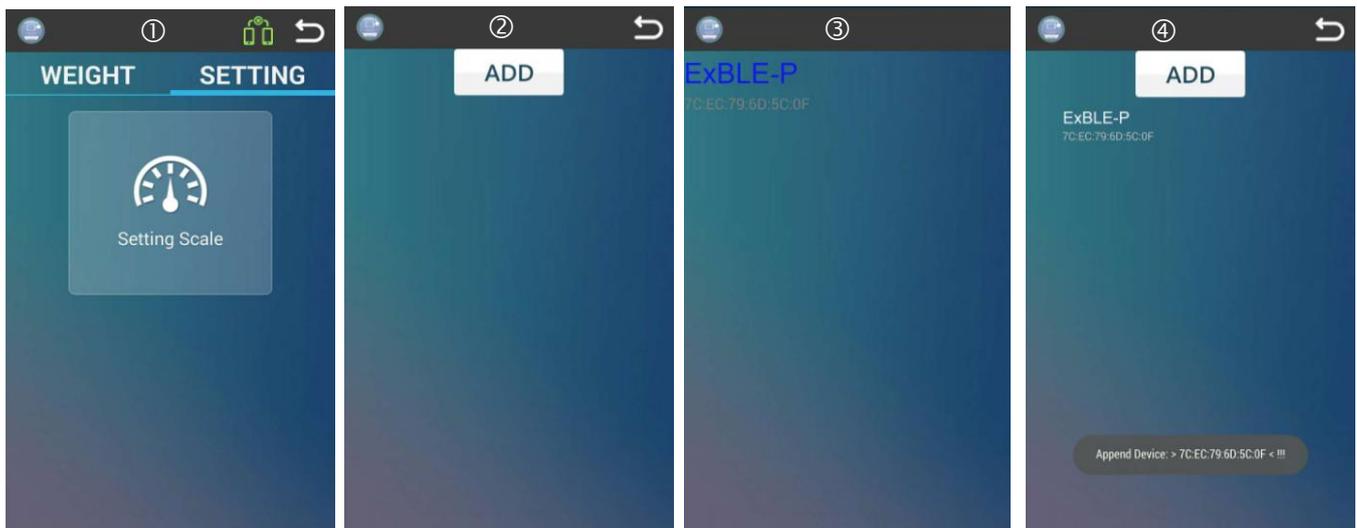
- 1. Hold [Calibration] key until calibration LED flashing.
- 2. Add device

Run the APP and select [SETTING] menu

- ❶ Click [Setting Scale] and enter add device page.
- ❷ Click [ADD] to add new device and Bluetooth starts scanning for new device.
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④ Return to add device page and the new device is added to the list while its MAC address appear the bottom.



### 3 . Connect the Device

Run the APP and select [WEIGHT] menu

- ① Click [Platform no] to enter device list.
- ② Click the device to be connected.
- ③ Once connected, weight value and device name display on app.



4. Link/Pair LED always on means pairing is successful.

### 5. Specification Setting

After connecting TM and APP, calibration parameter can be set.

Unit Selection	Select a unit (mg,g,kg,t,oz,lb)
Max. cap	Entering the maximum capacity
Division Selection	Select division (1,2,5,10)
Decimal Point Selection	Select numbers of decimal points
Resolution	Max. cap/division
Max. Show	No need to enter. Value = Max. cap + 9*division



Cal. Weight	Entering calibration weight ( $\leq$ Max. Capacity)
Linearity Segment	Select numbers of segments
Zero Track (D)	Entering Zero Tracking range
Zero Key Range (+/- %)	[ZERO] key range
Initial Zero Range (+/- %)	Entering Initial Zero Range
Calbrating G	Entering G value used in verification (default: 9.18914)
Used Area G	Entering local G value (default: 9.18914)

## 6. Linearity Calibration/ Calibration

Run the APP and select [WEIGHT] menu

❶ After 5. Specification Setting, click [Calibration Start] to start linearity calibration.

(If Linearity Segment set as 0, only do ❶~❷)

❷ No load on platform, click [Confirm].

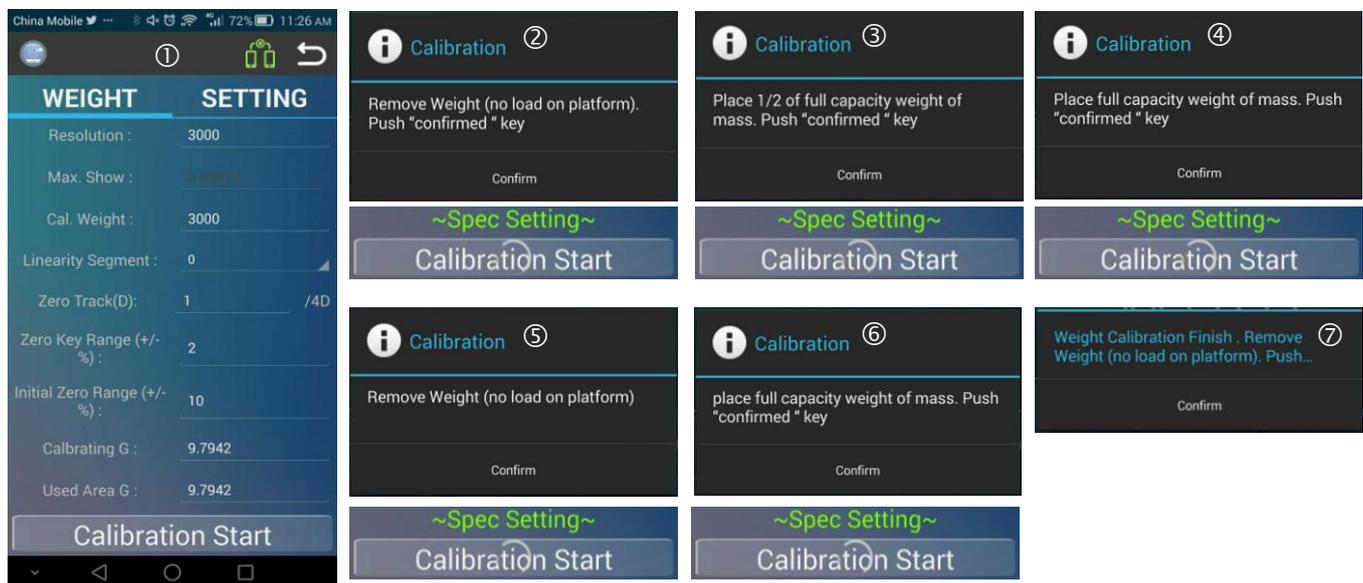
❸ Place 1/2 of Max. Capacity of weight on platform and click [Confirm].

❹ Place Max. Capacity of weight on platform and click [Confirm].

❺ Start weight calibration. Remove the weight on platform and click [Confirm].

❻ Place Max. Capacity of weight on platform and click [Confirm].

❼ Remove the weight on platform and click [Confirm] to finish calibration.



7. To end calibration mode, press [Calibration] key for 3 secs until calibration LED off.

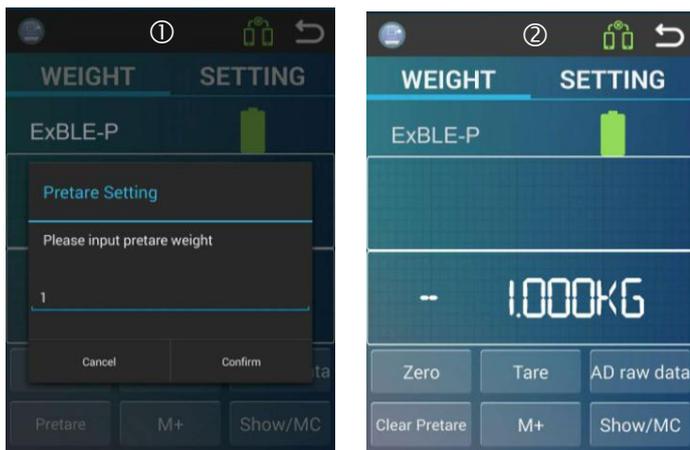


## 7. Key Description

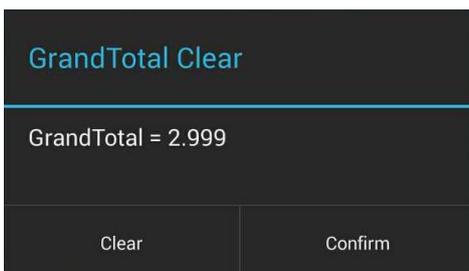


☰ Stable: weight shows in “**white**”, Unstable: weight shows in “**black**”

- ❶ Zero key: When the weight is stable and is not zero, click this key to zero the scale.
- ❷ Tare key: Place the object on the platform. After the weight is stable, click this key to deduct the weight. Remove the object, it displays the negative weight.
- ❸ Pretare key: when the weight is zero and stable, click this key to set pretare value. Enter value that is less than and equal to Max. capacity. (see picture 1) and then click [CONFIRM] to perform pretare. (see picture2)

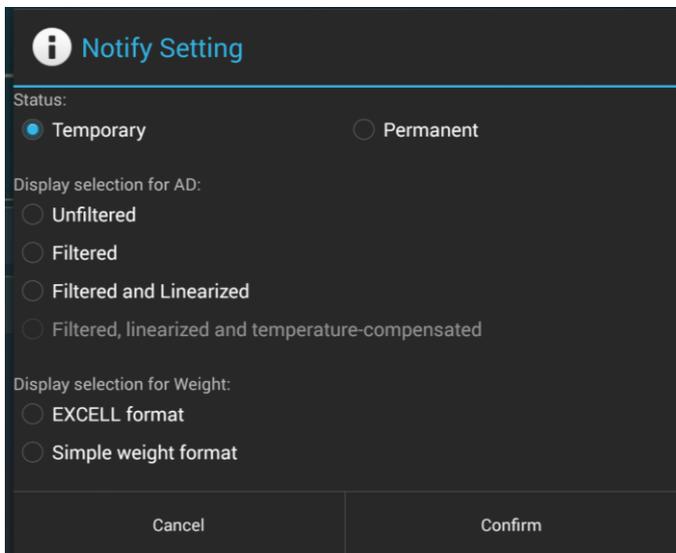


- ❹ M+ key: Place the object on the platform and click [M+] to accumulate. When “ACC OK” appears that means finishing accumulation. When accumulate the weight, the weight should be stable and not be zero.
- ❺ SHOW/MC key: After accumulation, click this key to display current total accumulation. Click [Clear] to clear the value.





- AD RAW DATA key: Click [AD RAW DATA] to shift between weight and internal value. Click [AD RAW DATA] for several secs to set this key as Temporary/Permanent, display selection for AD and display selection for weight. Click [CONFIRM] to finish setting.

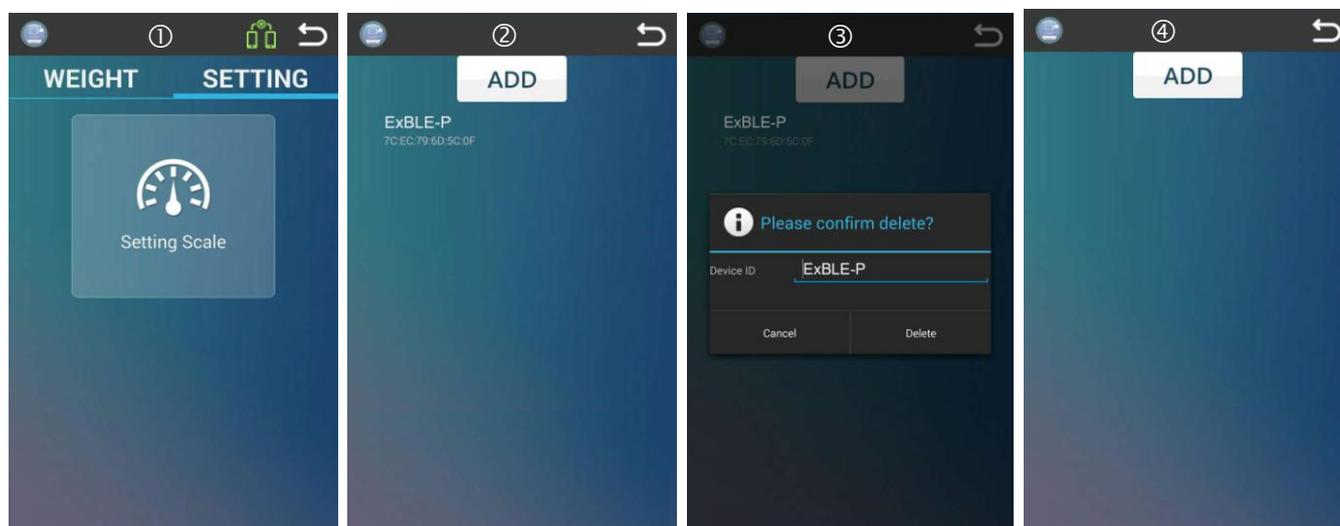


## 8. Other Functions

### 8-1. Delete the Device

Run the APP and select [SETTING] menu

- Click [Setting Scale] and enter add device page.
- Press and hold the device for removal until the dialouge shows up.
- Click [Delete] to delete the device.
- The device will be deleted from the list.

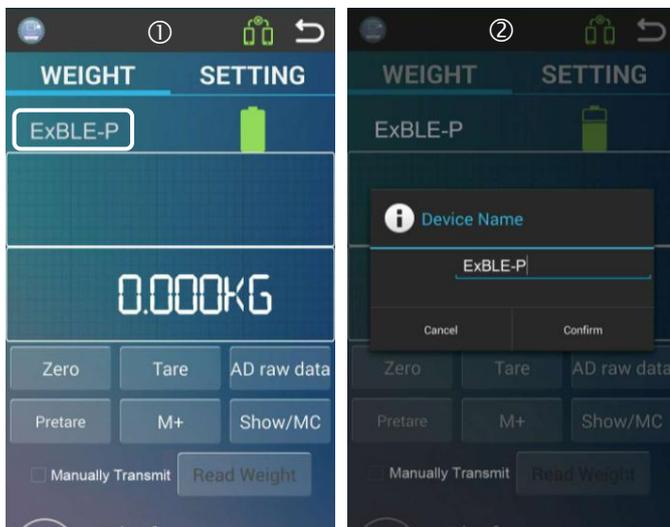




## 8-2. Change the Device Name

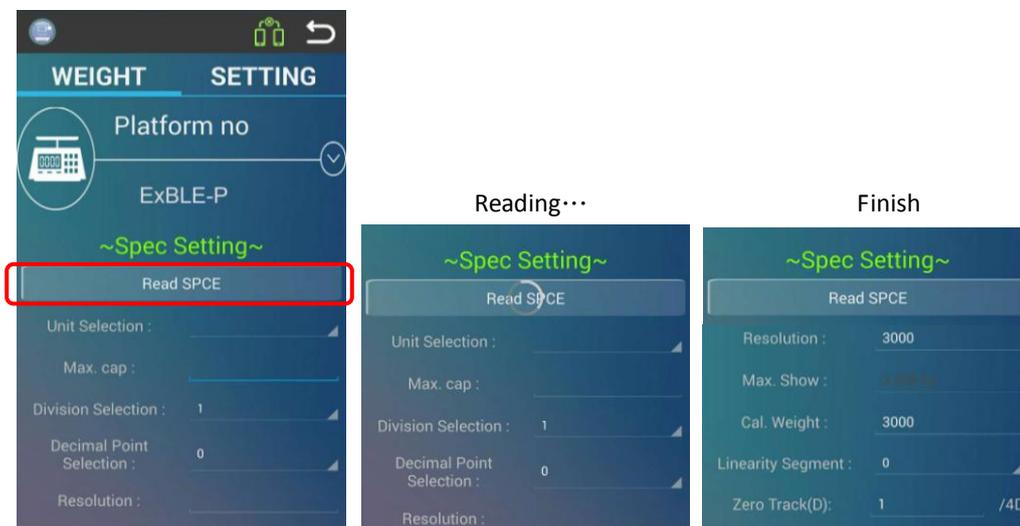
After connecting TM and APP, run the APP and select [WEIGHT] menu

- 1 Press and hold the device name such as "18630811" until the dialouge shows up. E.g "ExBLE-P"
- 2 Enter the new device name and click [Confirm].



## 8-3. Reading Specification Parameter

After connecting TM and APP, click [Read SPCE] to read parameter.





## 9. Output Format Under Pairing Mode In EXCELL Format

Transmission Format (20 Bytes):

Status1	,	Status2	,	±	Weight(Decimal point)	Unit	CR	LF
---------	---	---------	---	---	-----------------------	------	----	----

Data	Description	
Status1 (2 Bytes)	<b>character</b>	<b>status</b>
	ST	Stable
	US	Unstable
	OL	Plus OL/Minus OL
Status2 (2 Bytes)	NT	Net weight
	GS	Gross weight
	TR	Tare weight
	PT	Pretare weight
	RT	Read Tare
	RP	Read PreTare
	BA	Read Battery
±	Positive or negative (1 Bytes)	
Weight(Decimal point)	Weight including decimal point(8 Bytes)	
Unit	Unit (3 Bytes)	
	1.	<SP> <SP> <SP>
	2.	<SP> m g
	3.	<SP> <SP> g
	4.	<SP> k g
	5.	<SP> <SP> t
	6.	<SP> o z
	7.	<SP> l b
CR LF	0x0D 0x0A (2 Bytes)	

Receive Format:

Status	Command(ASCII)	Command(HEX)	Description
setting	MZ	0x4D 0x5A 0x0D 0x0A	Zero
	MT	0x4D 0x54 0x0D 0x0A	Tare
	PT<Number>	0x50 0x54 <6 Bytes> 0x0D 0x0A	Set pretare Number: 000000~999999(6 Bytes)
reading	RW	0x52 0x57 0x0D 0x0A	Transmission(single)
	RP	0x52 0x50 0x0D 0x0A	Read Pretare value
	RT	0x52 0x54 0x0D 0x0A	Read tare value
	RB	0x52 0x42 0x0D 0x0A	Read remaining battery status

