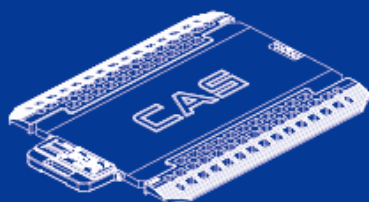


RW-PLZ

Vehicle Weighing Scale



CAS

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Caution

Please follow the safety cautions to use the product safely and appropriately.

The following are two classifications of caution which are “warning” and “caution”

Warning

There is a risk of death or serious injury if ignored.

Caution

There is a risk of injury or material damage if ignored.

Caution

1 This radio device has the possibility of radio interference during operation.

Warning

- 1. Do not disassemble, repair, or alter.
You may not be able to receive warranty, and it can be the cause for equipment damage, electric shock, and fire.
- 2. Keep away from combustible sprays and fire.
- 3. Do not place under direct sunlight or near hot objects. It is subject to fire danger.
- 4. We are not responsible for any damages that occur from using a Battery other than the supplied Battery.
- 5. Strong impact to the electronic parts may cause a failure.

1. Introduction

Thank you for purchasing our CAS RW-PLW product.

RW is a scale used to measure the weight value of each axle.

Under our strict quality management, this product has been through rigorous tests and it holds excellent performance and unique characteristics.

It has been programmed to promote user's convenience and to easily navigate the display functions.

Also, message indication functions are built in to assist the user understand the functions.

Before using our Road Weigher, we recommend that you read this manual carefully to fully understand and apply the RW functions.

● Cautions

- Do not press the Keys hard, it can be operated by pressing gently.
- Do not use ignitable material when cleaning.
- Avoid places with sudden temperature changes.
- Do not use this product in places with high voltage and excessive electrical noises.
- Keep in a dry place.
- Do not use in places with direct sunlight and heavy dust.
- Do not use in places with excessive electrical noises and vibration.

2. Features

Features
It can measure the entire load and axle load of vehicles under 10 axles.
It can be easily charged with Micro 5 V USB and conveniently replaced.
With the high capacity Battery, it can be operated for long hours and the remaining Battery can be checked.
The grade is IP 67 and it has outstanding waterproof capabilities.

● Product Specifications

RW-PLW	
Operating Power	Outer Battery pack operation (3.7 V Li-ion)
Power Source	Uses MICRO 5 PIN USB 5 V
Operating Temperature	-10 °C ~ 40 °C
Mono LCD	5 Digits 7 segment LCD (Exception ‘-’ sign)
Backlight	2 LED / Side white
Supplement Display	Stability, zero point, PAD number, Battery, unit
Accessories	Battery pack User manual section 1,

● Option

Dummy Plate: to minimize Errors when weighing vehicles with more than 3 axles

3. Technical Specifications

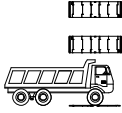
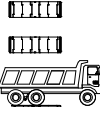
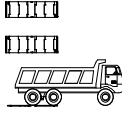
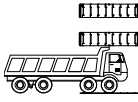
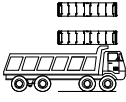
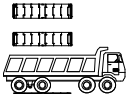
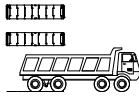
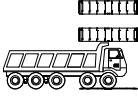
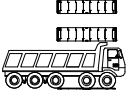
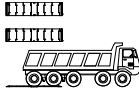
MODEL	RW-500PLW SERIES		
	RW-501PLW	RW-502PLW	RW-505PLW
CAPA (lb/kg)	2,000 lb (1,000 kg)	5,000 lb (2,000 kg)	10,000 lb (5,000 kg)
Division (lb/kg)	5 lb (2 kg)	10 lb (5 kg)	20 lb (10 kg)
Platform size (mm)	400 X 500 mm		
Body weight (kg)	12 kg		
Option	DUMMY PLATE (2.43 kg)		

MODEL	RW-700PLW SERIES		
	RW-705PLW	RW-710PLW	RW-715PLW
CAPA (lb/kg)	10,000 lb (5,000 kg)	20,000 lb (10,000 kg)	30,000 lb (15,000 kg)
Division (lb/kg)	20 lb (10 kg)	50 lb (20 kg)	50 lb (20 kg)
Platform size (mm)	700 X 500 mm		
Body weight (kg)	18 kg	22 kg	
Option	DUMMY PLATE (3.45 kg)		

MODEL	RW-900PLW SERIES		
	RW-910PLW	RW-915PLW	RW-920PLW
CAPA (lb/kg)	20,000 lb (10,000 kg)	30,000 lb (15,000 kg)	50,000 lb (20,000 kg)
Division (lb/kg)	50 lb (20 kg)	50 lb (20 kg)	100 lb (50 kg)
Platform size (mm)	900 X 500 mm		
Body weight (kg)	23 kg		28 kg
Option	DUMMY PLATE (4.13 kg)		

MODEL	RW-PLW SERIES (Common)
Waterproof level	IP67
DISPLAY	5 digit 7 segment LCD (Except '-'), Character height 15 mm, back light
Key	ZERO, UNIT Change, LIGHT, ON/OFF
Comm. method	2.4 GHz Short Range Device
A/D Conversion speed	Static weighing: 10 times/sec, Dynamic weighing: 100 times/sec
Battery	3.7 V / 7,800 mAh Li-ion
Using time / Charging time	120 hours / 12 hours _ Detachable manner
Main features	Weight change speed adjustment (Low to High) Balance measurements Weigh-In-Motion (WIM) / Specification: Less than 10 km/h, +/- 3% accuracy
Option	DUMMY PLATE

4. Positioning and Quantity of the Measuring Plate for Precise Measurements

Classification			1st weight measure	2nd weight measure	3rd weight measure	4th weight measure
	Q'TY	ACCURACY				
2 axle vehicle * Content Poor	PAD: 2EA	±1~3%				
3 axle vehicle * Content Poor	PAD: 2EA DUMMY: 24EA at least	±1~3%				
4 axle vehicle * Content Poor	PAD: 2EA DUMMY: 24EA at least	±1~2%				
5 axle vehicle * Content Poor	PAD: 2EA DUMMY: 24EA at least	±1~3%			• • • • •	

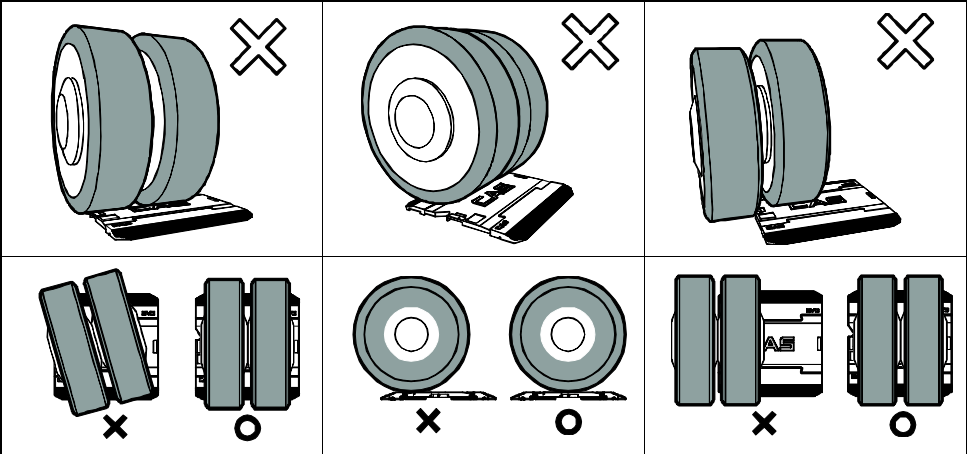
Note 1. Please install the PAD as much as the axis of the truck for accurate measurements.

Note 2. If only two of the RW-PLW PAD are used without a DUMMY PLATE, a measurement Error margin of ±10~13% may occur.

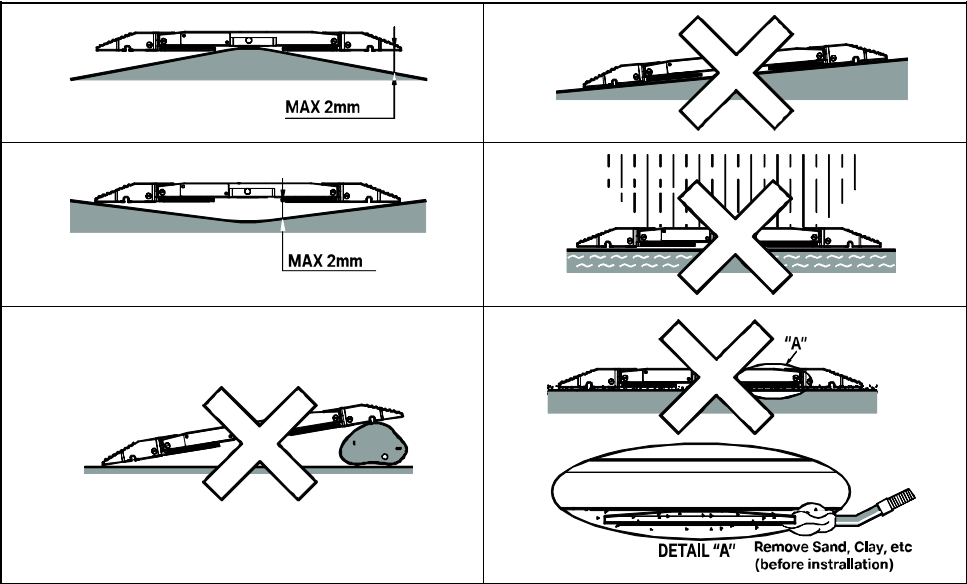
For precise measurements, use DUMMY PLATES for each axle. This may decrease the measurement Error margin to ±1~3%.

Moreover, measurement Error can occur depending on the ground and vehicle conditions.

● Incorrect Measurement Method



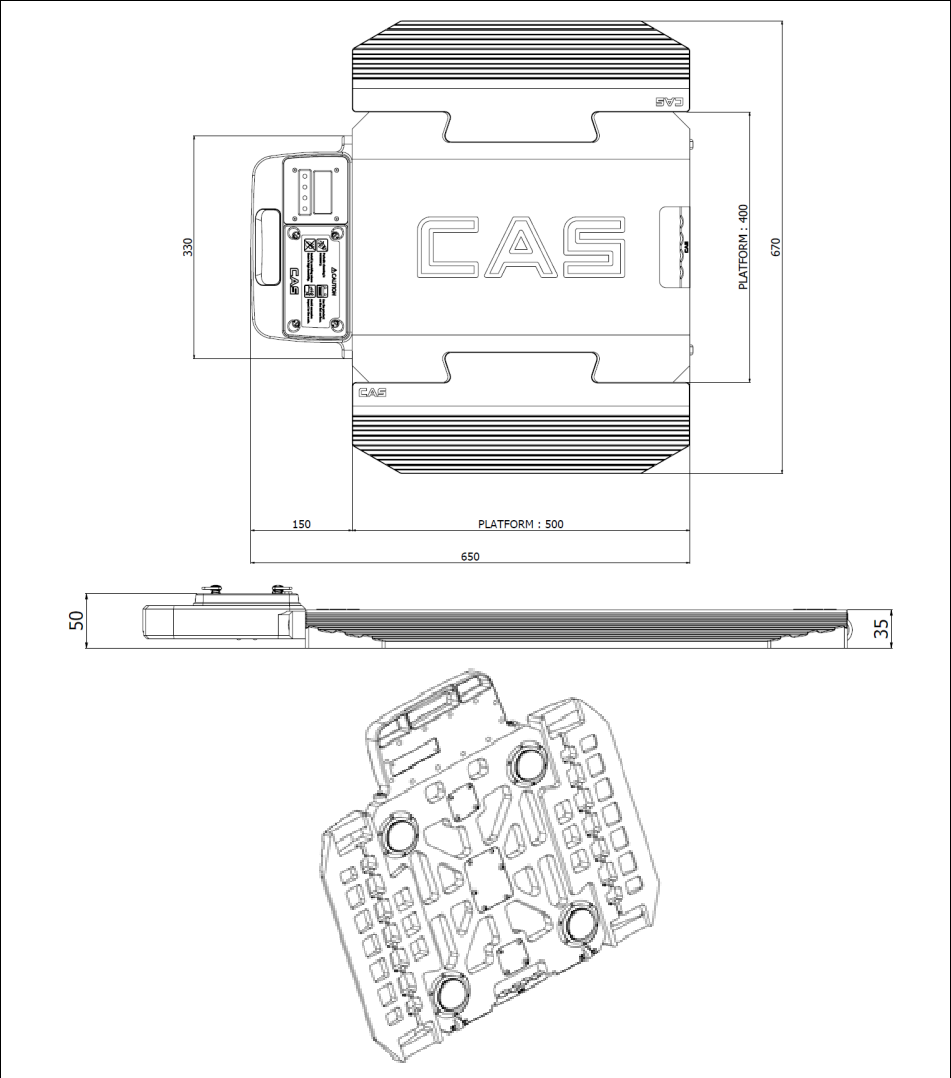
1. Aligning the PAD with the center of the wheel.



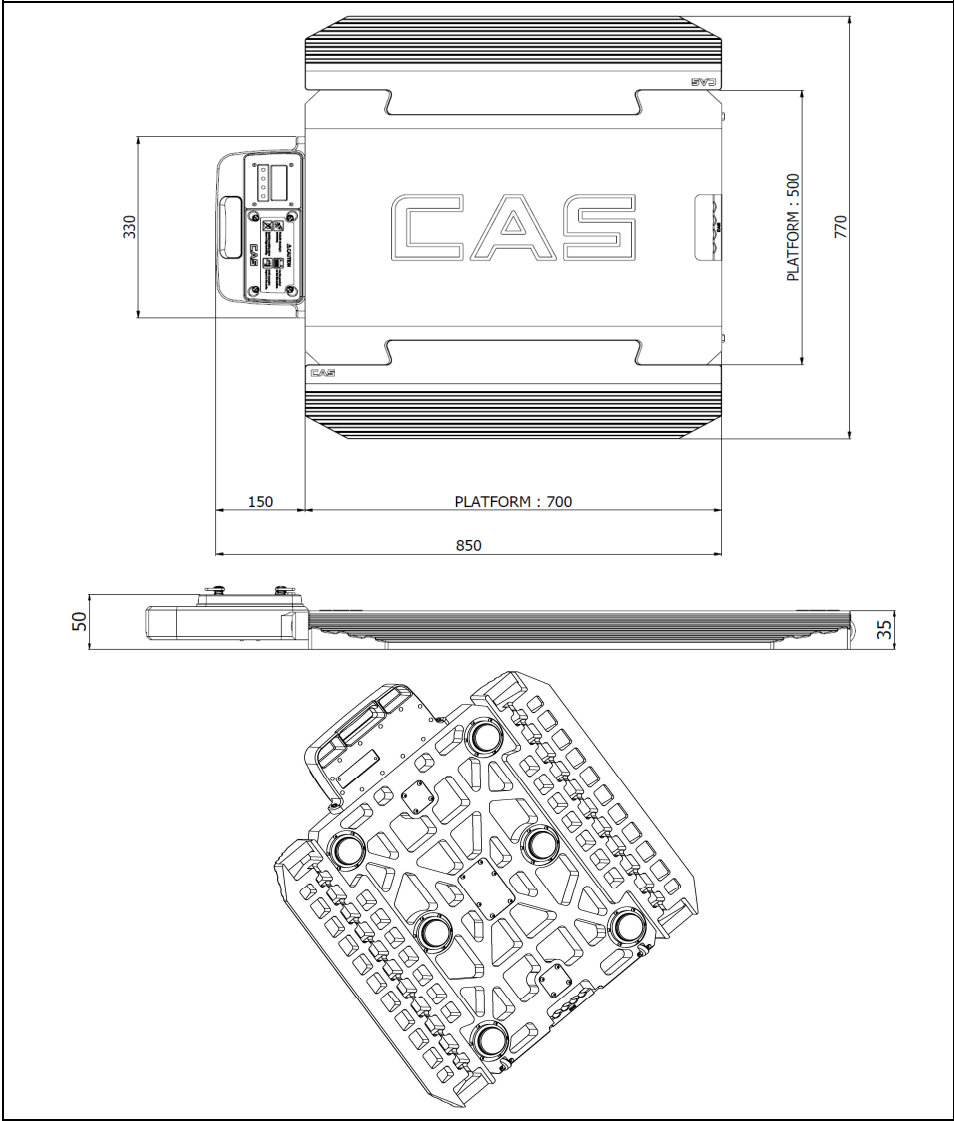
- 2. Situations with unlevelled ground or foreign materials which deters levelness for accurate measurement.
- 3. Rain/foreign material between Loadcell should not be present.

5. Product Size

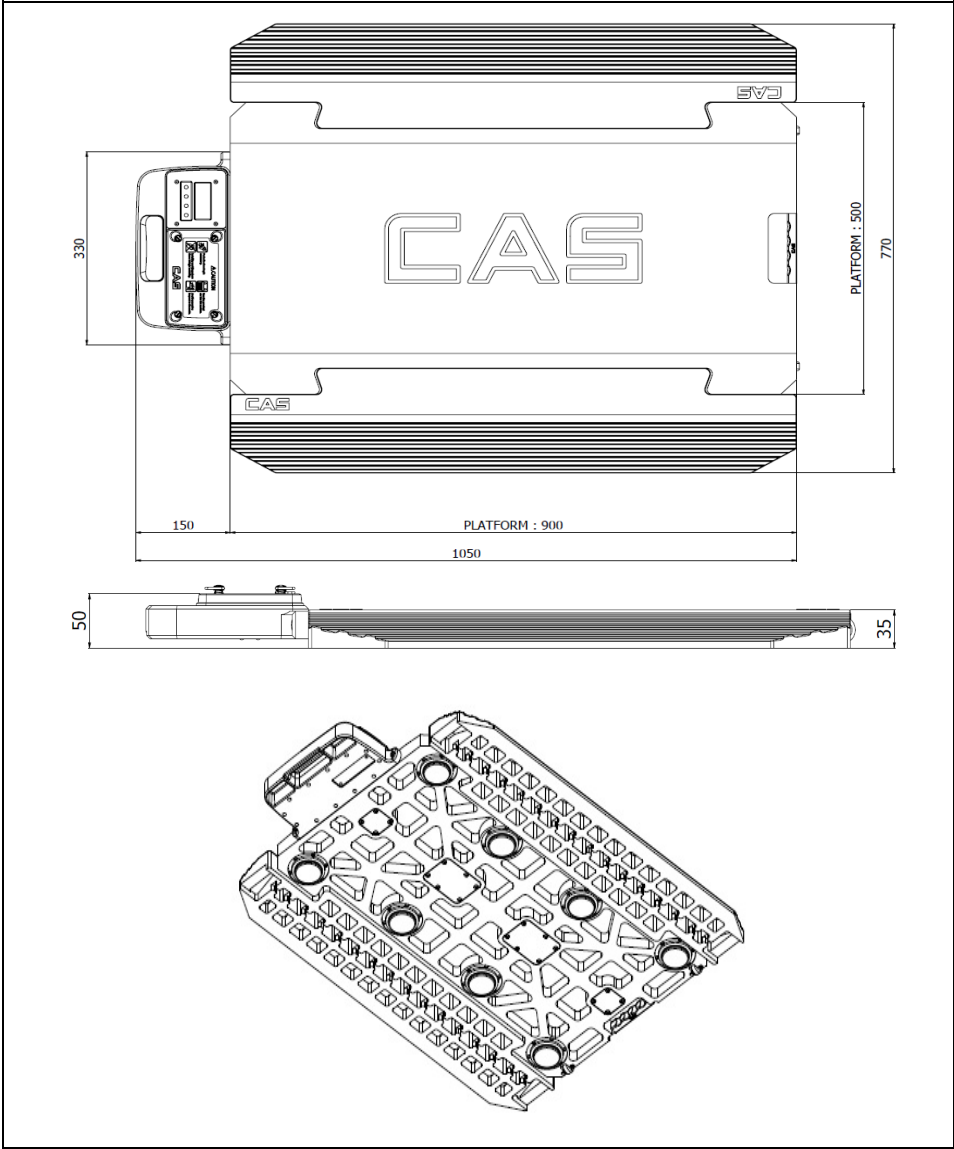
● RW-500 SERIES



● RW-700 SERIES



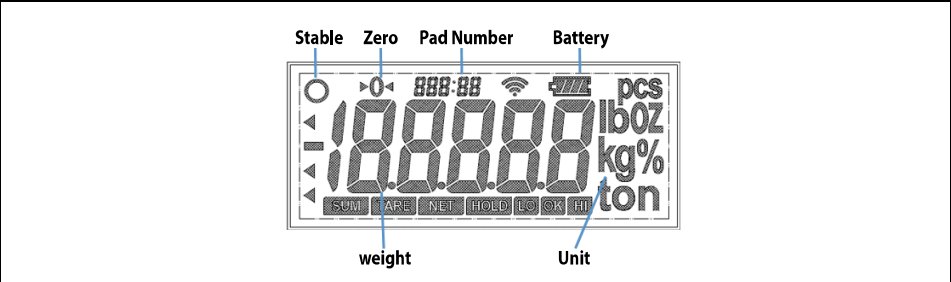
● **RW-900 SERIES**



6. Description of Functions

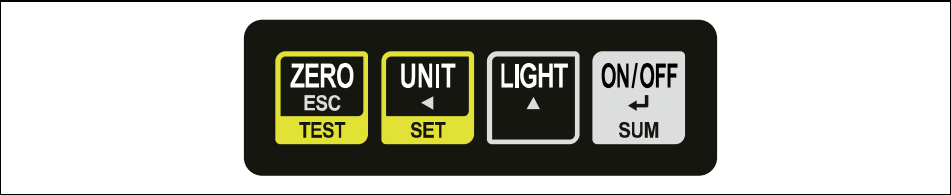
● Display

DISPLAY	FUNCTIONS
STABLE Lamp	Displays stability of the load being measured.
ZERO Lamps	It turns on when the current weight is 0kg.
Pad Number	Displays the number of the current pad. (Displaying SUM when using the SUM function)
Battery	Displays the remaining Battery power.



● Keypad

KEYS	FUNCTIONS
POWER (ON/OFF)	Long pressing the power ON/OFF Key, short pressing the SUM function. (Used as the enter Key when setting up)
ZERO	Resets the current weight to zero.
UNIT	Used as a unit change Key.
BL (Back light)	Used to turn on the back light.



● **Battery Pack Connection**

PORTS	FUNCTIONS
IN (MICRO USB 5 V)	Power port for Battery charge
OUT (DC JACK)	Port that connects the pad with the Battery pack



● **Battery Assembling Method**



● **Test Mode Method**

Press and hold on to the ZERO Key for more than 3 seconds.

● **Set Mode Method**

Press the “UNIT” Key for more than 3 seconds.

7. CAL(Calibration) Mode

What is Cal Mode?

When displaying the weight, it controls the correspondence of the displayed weight and the actual weight.

How to Use Cal Mode

When turned on, press the LIGHT Key (BACKLIGHT Key) to start the Cal Mode. (Password: 1992)
After setting the parameter in the CAL Mode, press the ZERO Key to return when entering the Weighing Mode.

CAL Menu (CAL1 – CAL8)

CAL 1: Maximum Cal Set

CAL 2: Minimum Division Set

CAL 3: Zero and Span Set

CAL 4: Direct Cal Set

CAL 5: Zero Control

CAL 6: Constant Weight Control and Check

CAL 7: Gravity Correction

CAL 8: Dual Range Set

● **CAL 1 (After Setting CAL 1, It Automatically Moves to CAL 2)**

CAL 1-1

Function: Unit Setting Setting Value Range: kg, lb, ton		
Key Used	Display	Description
BL Key: Change Units ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	kg	Unit: kg
	lb	Unit: lb

CAL 1-2

Function: Maximum Capacity Set (Maximum Value) Setting Value Range: 1 ~ 99,999		
Key Used	Display	Description
BL Key: Increase of number UNIT Key: Move digits ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	10000	Maximum capacity = 10000 kg
	10	Maximum capacity = 10 kg

Note 1. The maximum capacity means the maximum weight that the scale can measure.

● CAL 2

Function: Minimum Division and Dot Position Set Setting Value Range: 0.001 ~ 50		
Key Used	Display	Description
UNIT Key: Change minimum division ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	d= 0.001	Minimum division 0.001 kg
	d= 0.01	Minimum division 0.01 kg
	d= 0.1	Minimum division 0.1 kg
	d= 1	Minimum division 1 kg
	d= 10	Minimum division 10 kg

Note 1. If you press the ZERO Key while the decimal point is set, CAL2 will end.

Note 2. The external resolution is obtained by dividing the maximum capacity by the minimum division. Set the resolution within 1/30,000. If the external resolution is over 1/30000, Err 21 indication will be displayed.

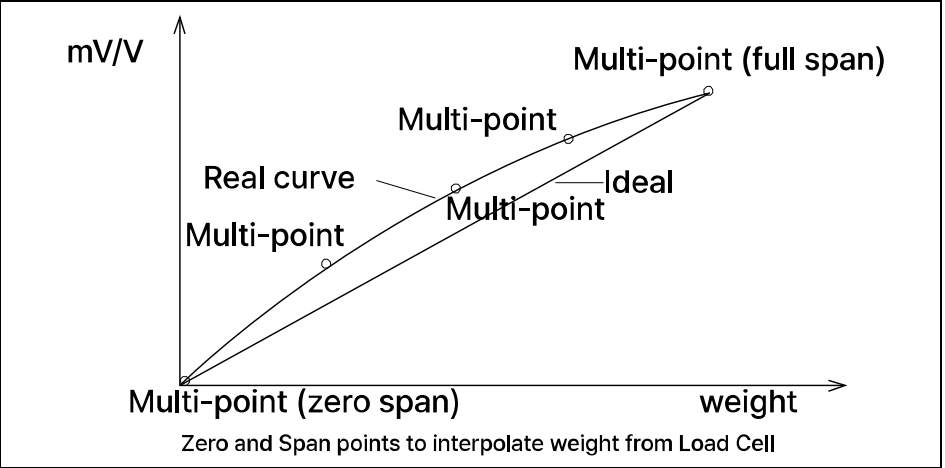
Note 3. The decimal point will be positioned according to the settings made in the CAL2 minimum division position settings.

● CAL 3

CAL 3-1

Function: Setting Multi Calibration Step		
Setting Value Range: 1 ~ 5		
Key Used	Display	Description
UNIT Key: Increase of number ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	STEP. 1	Step 1 multi calibration setting (CAL3-3, CAL 3-4: Conduct 1 time)
	STEP. 5	Step 5 multi calibration setting (CAL3-3, CAL 3-4: Conduct 5 time)

* A function used when compensating the load cell output by setting a multipoint line at a certain section without employing a straight line



CAL 3-2

Function: Zero Calibration		
Key Used	Display	Description
ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	UnLoAd	Unload the tray and press ENTER
	1234	It displays the current CAL
	---	Check the stability and press ENTER Zero calibration being processed...

Note 1. If the zero calibration is completed without any Errors, it will move to the Setting Weight CAL3-3 automatically.

CAL 3-3

Setting Weight		
Setting Value Range: 1 ~ 99,999		
Key Used	Display	Description
BL_Key: Increase of number UNIT Key: change digits ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	LOAD 1	It indicates the weight setting (Number = Multi calibration number)
	100.00	100.00 (Unit kg or ton)
	0.10	0.10(Unit kg or ton)

Note 1. The weight should be set within the range of 10% ~ 100% of the maximum weight.

CAL 3-4

Function: Weight Calibration		
Key Used	Display	Description
ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	LoAd	Load the weight which was set in CAL 4-3 on the tray and press ENTER
	12345	It displays the current CAL Check the stability and press ENTER
	---	Span setting in progress.

Note 1. CAL3-3, CAL3-4 will be conducted repeatedly according to the number set in the CAL 3-1 STEP.

At this point, a weight value that is higher than the previous value must be set.

Note 2. If the Span Calibration is completed without any Errors, then it will move to CAL-1.

● CAL 4 (Direct Calibration)

CAL 4-1

Function: Inputting the Load Cell Zero Value Manually Setting Value Range: 1 ~ 99,999		
Key Used	Display	Description
BL Key: Increase of number UNIT Key: change digits ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	ZECAL	Zero load cell value Input Mode
	0.0000	Load cell zero value = 0.0000 mV/V
	0.1000	Load cell zero value = 0.1000 mV/V

CAL 4-2

Function: Inputting the Load Cell Zero Value Manually Setting Value Range: 1 ~ 99,999		
Key Used	Display	Description
BL Key: Increase of number UNIT Key: Change digits ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	SPCAL	Span load cell value Input Mode
	1.2000	Load cell span value = 1.2000 mV/V
	2.0000	Load cell zero value = 2.0000 mV/V

● CAL 5

Function: Zero Adjust – Correction is Possible When a Zero Error Occurs		
Key Used	Display	Description
ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	2-CAL	Unload the tray and press ENTER
	1234	It displays the current CAL
	---	Check the stability and press ENTER Zero control in progress...

Note 1. Use when the zero calibration did not succeed due to impact.(Zero range is 0 ~ 2 mV/V)

Note 2. When the zero control completes without any Errors, it will move to CAL-1.

● CAL 6

Function: Constant Weight Control and Check (Factor Calibration)		
Key Used	Display	Description
BL Key: Increase of number	NOTUSE	Due to multi calibration, this function cannot be used.
UNIT Key: Change digits		
ZERO Key: Cancel	FACTOR	Entering FACTOR Correction Mode.
ON/OFF Key: Store and move to the next menu		
	12345	Indicates the current FACTOR value.

Note 1. This is a menu used when there isn't any weight on the scale. Therefore, it does not apply to general users.

Note 2. It can be used only when the Multi Calibration Range of CAL3-1 is set to 1.

Note 3. A password must be entered in order to move to the FACTOR Correction Mode.

● CAL 7

Function: Gravity Adjust		
Key Used	Display	Description
BL Key: Increase of number	GR CAL	Entering gravity Adjust Menu.
UNIT Key: Change digits	GrCAL	Set the gravity of the production area ex) 9.7994 -> 7994
ZERO Key: Cancel	XXXX	
ON/OFF Key: Store and move to the next menu	GrSET	Set the gravity of the area being used
	XXXX	Ex)9.7994 -> 7994

Note 1. If the value of the production area and the area being used is different, gravity correction can be completed with this function.

● CAL 8

CAL 8-1

Function: Dual Range Set Setting Value Range: 0 ~ 1		
Key Used	Display	Description
BL Key: Increase of number ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	DUAL- 0	Dual range function not used
	DUAL- 1	Dual range function used

Note 1. If the resolution is higher than 1/10,000, "OVER" message will be displayed and it will return to the CAL menu.

CAL 8-2

Function: Dual Range Applied Area Set Setting Value Range: 0 ~ 99999		
Key Used	Display	Description
BL Key: Increase of number UNIT Key: Change digits ZERO Key: Cancel ON/OFF Key: Store and move to the next menu	1000	Apply dual range below 1000 kg
	5000	Apply dual range below 5000 kg
	10000	Apply dual range below 10000 kg

Note 1. If the input value is greater than the maximum value, an "ERR SET" message will be displayed and it will return to the CAL Menu Mode.

8. Normal Mode [Weighing Mode]

8-1. Zero Function

Zero range: Operating range for the ZERO Key is designated in menu [F1.08].

	Display or Key	Plate	Described
Step 1		empty	The zero status has changed
Step 2			Press the ZERO Key
Step 3		empty	Zeroing is complete Current weight set to '0'.

8-2. SUM Function

- 1. Zigbee communication must be enabled in the communication settings. (F2.03.01)
- 2. The BLE channel must be the same for all pads. (F2.02)
- 3. Make sure that each pad has the same communication speed. (F2.04)
- 4. You must set the number of pads used to the number of pads that use the SUM function.
(MAX PAD NUMBER: 12) (F2.06)
- 5. The pad numbers must be set sequentially, starting with 1. (F2.01)

	Display or Key	Plate	Described
Step 1		PAD1= 1000kg	State with vehicle placed on the PAD1 and PAD2.

		PAD2=1000kg	
Step 2			Press the UNIT Key
Step 3		PAD1=1000kg PAD2=1000kg	Summing is complete. Current weight is sum weight.

* In case of SUM function Error, the Error display time is delayed by about 3 seconds.

8-3. Unit Change Function

	Display or Key	Plate	Described
Step 1		PAD1=2000lb	State with vehicle placed on the PAD1
Step 2			Press the UNIT Key
Step 3		PAD1=1000kg	Unit Change complete.

9. Test Mode

How to Enter

When turned on, press the ZERO Key and the Test Mode will begin.
Also, if the ZERO Key is pressed for more than 3 seconds while in the Scale Mode, ‘Test’ will be displayed.
Press the ZERO Key to return to the Weighing Mode from the Test Mode.

Menu No.	Test item
1	Key Test
2	Display Test
3	AD Test
5	Internal A/D Test
6	EEPROM Test
7	Battery Test

TEST 1

Function: General Key Test		
Key	LCD Display	Description
Any Key: Key Test ON/OFF Key: Exit the current Test Mode	KEY - KEY . XX	If you press the Key to be Tested, the code for that Key will be displayed

TEST 2

Function: LCD Display Test		
Key	LCD Display	Description
ON/OFF Key: Exit the current Test Mode	Display Test	Press the ENTER Key to start the display test

TEST 3

Function: A/D Converter Test (Load Cell Test)		
Key	LCD Display	Description
ON/OFF Key: Exit the current Test Mode	xxxxxxx	Indicates the AD value.

Note 1. Increase and decrease the weight on the tray to Test if the number moves accordingly. If a number 0 or a fixed number is displayed, recheck to see if the load cell has been connected properly.

TEST 5

Function: Internal A / D Test		
Key	LCD Display	Description
ON/OFF Key: Exit the current Test Mode	xxxx xx	When the ENTER Key is pressed, the internal value will be displayed

TEST 6

Function: EEPROM Test		
Key	LCD Display	Description
ON/OFF Key: Exit the current Test Mode	ROM OK ROM NG	It will indicate the EEPROM operational status.

TEST 7

Function: Battery Test		
Key	LCD Display	Description
ON/OFF Key: Exit the current Test Mode	B : X X X	Indicates the current Battery remaining.

10. Set Mode (Conversion Mode)

How to Enter Set Mode

When turned on, press the UNIT Key to start the Set Mode
Also, if the UNIT Key is pressed for more than 3 seconds while in the Scale Mode, 'Set' will be displayed.
After setting the parameter in the Set Mode, press the ZERO Key to return when entering the Weighing Mode.

Classification	Menu	Default Value	Sub Menu
1. Scale Function	F1.06	1x0.5	Weight Stabilization Range
	F1.07	1x0.5	Set Automatic Zero Calibration Range
	F1.08	10%	ZERO Key Operation Range
	F1.09	10%	Initial Zero Operation Range
	F1.11	9x0.5	Overload Check Range
	F1.18	01	Set Key Utilization Conditions
	F1.20	00	Initialization of Set Value
2. Set Wireless Communication	F2.01	01	Pad Number
	F2.02	01	Set Wireless Communication Channel
	F2.06	00	Set Master Slave
	F2.07	00	Set Pad Number of SUM
	F2.08	01	Set the Error Sensitivity
3. Set Device	F3.01	00	Set Back Light Operation
	F3.02	03	Set Back Light Brightness
	F3.03	00	Use Battery Saving Function

10-1. Scale Functions (General Function)

Menu-F1.06: Set Weight Stabilization Range

Function	Set Weight Stabilization Conditions (Motion Detection Condition)	
Set Range (0~99)	Display	Description
	STA. XX	The stabilization lamp comes on when the weight conversion range is within the set value x 0.5 division in a certain period time.

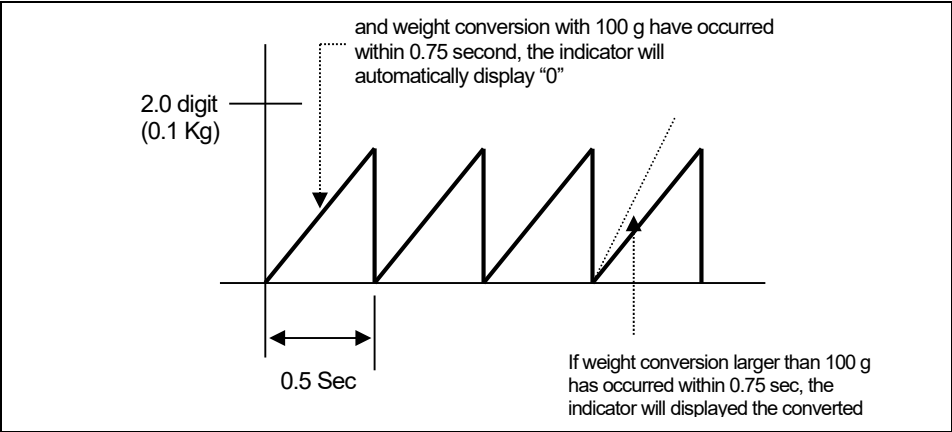
- Note 1. It is a function that considers the following as stable if the load transformation range does not pass the set range X 0.5 division, within the set time.
- Note 2. To speed up the weight stabilization, set a high number for environments with a high level of vibration and a low number for environments with a low level of vibration.

Menu-F1.07: Set Automatic Zero Calibration Range

Function	Set Automatic Zero Conditions (Zero Tracking Compensation)	
Set Range (0~99)	Display	Description
	ZTR. XX	The stabilization lamp comes on when the weight conversion range is within the set value x 0.5 division in a certain period time.

Note 1. This function automatically corrects the zero calibration if the load does not pass the certain range of division within a certain period of time.

Ex) If the maximum indicated division is 120.0 Kg, and when one division value is set to 0.05 Kg, F1.07 set to “2”,



Menu-F1.08: ZERO Key Operation Range

Function	Set Zero Range	
Set Range (0~99)	Display	Description
	ZKR. XX	Operate ZERO Key within +/- ○ ○ % of maximum weight

Menu-F1.09: Initial ZERO Key Operation Range

Function	Set Initial Zero Operation Range (Init Zero)	
Set Range (0~99)	Display	Description
	ZIR. XX	Operate initial ZERO Key within +/- ○ ○ % of the maximum weight

Menu-F1.11: Set Overload Check Range

Function	Set Overload Check Range (Weighing Unit)	
Set Range (0~99)	Display	Description
	OVR. XX	Overload if over the maximum weight 0 x 1 digit

Menu-F1.18: Key Usage Conditions

Function	Set ZERO Key, TARE Key Conditions	
Set Range (0, 1)	Display	Description
	STC. 0	Operate at all times
	STC. 1	Only operate when weight is stable

Menu-F1.20: Initialization of Set Value

Function	Initialization of Set Value	
Set Range (0,1)	Display	Description
	INIT. 0	None of the products' set values have been changed from the factory default settings.
	INIT. 1	None of the products' set values have been changed from the factory default settings.

10-2. Set Wireless (ZIBEE) Communication

Menu-F2.01: Pad Number

Function	Set Pad Number (Device ID)	
Set Range (1~12)	Display	Description
	PAD. XX	Any pad number can be set.

Menu-F2.02: Set Channel

Function	Set wireless communication channel	
Set Range (1~3)	Display	Description
	CH. XX	Connect with XX channel

Menu-F2.06: Set Master Slave

Function	Set Master Slave	
Set Range (0,1)	Display	Description
	MST. 00	Set to slave
	MST. 01	Set to master

Menu-F2.07: Set the Number of Pad to Perform SUM

Function	Set Pad Number of SUM (Number of Devices)	
Set Range (2~12)	Display	Description
	SUM. XX	Set the number of pads you want to proceed with the sum function.

Menu-F2.08: Set the Error Sensitivity

Function	Set the Error Sensitivity	
Set Range (1~10)	Display	Description
	ESC. XX	Sets the Error sensitivity. (The smaller the number, the more sensitive it is to the Error.)

10-3. Set Device

Menu-F3.01: Set Back Light Operation

Function	Set Back Light Operation	
Set Range (0~5)	Display	Description
	blo. 00	Backlight on/off when LIGHT Key is short pressed
	blo. 01	Back light turns on when Key is pressed (5 seconds on)
	blo. 02	Back light turns on when weight is changed
	blo. 03	Back light turns when stabilization is achieved after weight change
	blo. 04	Back light turns on when Key is pressed and weight is changed
	blo. 05	Back light is always on

Menu-F3.02: Set Back Light Brightness

Function	Set Back Light Brightness	
Set Range (0~7)	Display	Description
	b-l. 01	Set 10% brightness
	b-l. 02	Set 30% brightness
	b-l. 03	Set 50% brightness
	b-l. 04	Set 60% brightness
	b-l. 05	Set 70% brightness
	b-l. 06	Set 90% brightness
	b-l. 07	Set 100% brightness

Note 1. If a number outside of the setting range is selected, '3' brightness will be indicated.

Menu-F3.03: Use Battery Saving Function

Function	Use Battery Saving Function	
Set Range (0~1)	Display	Description
	BCN. 0	Disable Battery saving function
	BCN. 1	Enable Battery saving function

11. Charge and Usage Time

- 1. Charge the Battery before use if it has not been operated for a long period time.
- 2. The remaining Battery power will be displayed on the top right of the display.
When the Battery power reaches 3 .1 V, it will turn off automatically
- 3. Charge the Battery if the remaining Battery indicator disappears from the screen.

11-1. Charging and Use of Rechargeable Battery

- 1. Red light will turn on when the charging cable is connected to the Battery pack.
When the Battery is fully charged, the green light will turn on.
- 2. Charging time takes about 12 hours.

11-2. Battery Usage Time

Model	Condition	Usage time or count
RW-PLW	Generally Measured	Approx. 120 hours

※ Note. The time above is subject to change depending on the period the Battery has been used.

12. Error Message and Troubleshooting

12 - 1. Errors That May Arise From Cal Set Mode

Error	Reason	Trouble Shooting
Err 20	The set resolution exceeds the limit of 1/10,000	Lower the resolution. Resolution = maximum allowed weight/one division. Change the maximum allowed weight in CAL1 or modify the division in CAL2 to lower the resolution to below 1/10,000.
Err 21	The set resolution exceeds the limit of 1/10,00	Lower the resolution. Resolution = maximum allowed weight/one division. Change the maximum allowed weight in CAL1 or modify the division in CAL2 to lower the resolution to below 1/30,000.
Err 22	The weight for span calibration is set below the scale's maximum capacity of 10%.	Set the weight for span calibration in CAL3 higher than the scale's maximum capacity (Set in CAL1) of 10%.
Err 23	The weight for span calibration exceeds the scale's maximum capacity of 100%.	Set the weight for span calibration in CAL3 within the scale's maximum capacity (Set in CAL1) range.
Err 24	Span is too low.	There is a load cell Error or the load cell output is too small to set the current resolution. Repeat the calibration process with lowered resolution.
Err 25	Span is too high.	There is a load cell Error or the load cell output is too high. Repeat the process starting from CAL3 zero control step.
Err 26	Zero calibration is too high.	Check to see if the tray is empty. After rechecking Test Mode 3, proceed the calibration again.
Err 27	Zero calibration is too low.	Check the type of pressure forced on the tray in Test Mode 3 and proceed with the calibration again.
Err 28	The weight is unstable.	Check to see if the load cell connector has been connected properly.

12 - 2. Errors that May Arise From Cal Measuring

Error	Reason	Trouble Shooting
Err 01	Due to the unstable shaking phenomenon in the weight, scale initialization cannot be done.	Turn on the power after placing the tray on a flat surface without vibrations.
Err 02	The load cell is not connected properly or there is an Error in the A/D conversion component.	Check to see if the tray has been properly connected to the main body.
Err 09	The current weight deviates from the zero range.	Set the ZERO Key operation range in F13 of the Conversion Mode to within 2% or 10% of the maximum capacity.
Err 10	The tare weight selected exceeds the maximum capacity of the scale.	Set the tare weight less than the maximum capacity of the scale.
Err 13	Set zero value in the Cal Set has deviated.	Check the tray status and proceed the calibration again.
Err 82	There is an Error in the A/D conversion component.	Please contact the A/S center.
OVER	The load on the tray is too heavy, and it exceeds the scale's maximum limit.	Do not place loads that exceed the scale's maximum limit. If the load cell has been damaged, it must be replaced.
M-Err	Occurs when SUM function is performed on a pad other than the master pad	Set only one master pad and press SUM button only on the master pad.

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RW-PLZ

Vehicle Weighibg Scale



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