

USER'S MANUAL

ATTACHMENT F

Road Weigher

RW-2601PRF

Owner's Manual



CAS

**Federal
Commission**

**Communications
Requirements**

Warning : Changes or modifications not expressly approved by the party responsible for compliance with the FCC'S rules could void the user's authority to operate the equipment .

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 instruction, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment dose 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**

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1. Preface

We greatly appreciate for your purchase of the CAS RW-2601PRF.

These goods have hold excellent performance and splendid properties through strike tests as well as devoting ourselves under severe quality management.

Before using RW-2601PRF, it is recommended to read this manual carefully and to apply the function application fully.

Cautions

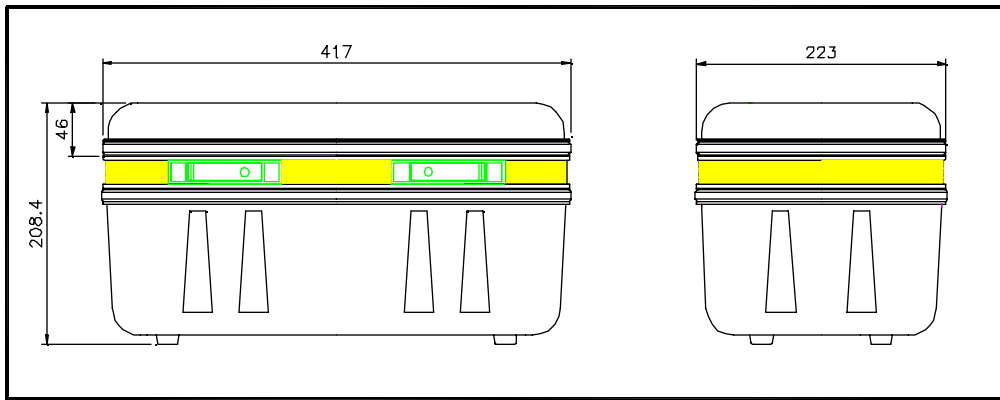
- Do not press the keys hardly, for the keys are in operation with soft touch.
- Keep away RW-2601PRF from the rain.
- Avoid sudden temperature change.
- Do not install RW-2601PRF in a place with high voltage and excessive electrical noises.
- Keep it in dry place.
- Do not use under direct rays.
- Do not use at the place with excessive electrical noises and vibration.

2. Features

- Ø Up to 6 axle(P/F) scales
- Ø Ωιρελεσσ δατα χομμυνηχατιον ωιτη ΡΩ-10ΠΡΦ
- Ø Εαση το σετυπ της Ινστρυμεντ
- Ø Compact size & light weight Box type
- Ø Built in Battery Charger & Large capacity Battery
- Ø Back-Light Function
- Ø Optional Printer

3. Specifications

- Ø Dimensions



Specifications

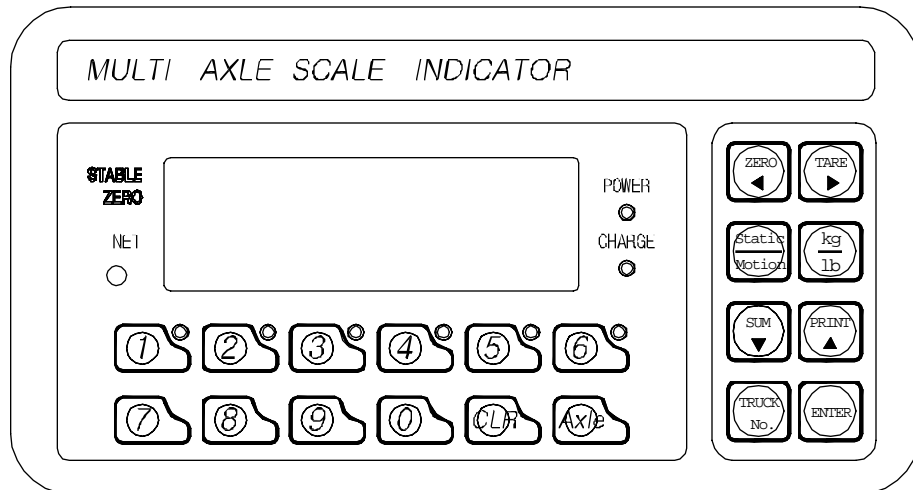
ITEM	Description
Operating Power	Inner Battery Operation.(DC6V)
Power Source	AC 120V, 60 Hz (For Battery Charger)
Display	LCD 6 Digit (25 mm)
Sub display	Stable, Zero, Net
Product Weight	9.2 kg
Option	Built -in Printer

Frequency	903.000Mhz < 918.500Mhz
Communication method	FSK (Frequency Shift Keying fsk)
Comm. speed	9600bps
Comm. distance	Max. 100M
Display below zero	“-” display
Battery life time	Approx. 20 hours
Battery charging time	Approx. 12 hours
Power consumption	12 W
Temperature range	-10 <+40

4. Front Panel

(1) Display Lamp

STABLE : Ωειγητισταβλε
NET : ON (vet ωειγητ), OFF (γροσσ ωειγητ)



ZERO : "0" key
POWER : Supply AC POWER SOURCE.
CHARGE : Green Lamp -> Charging is completed.
Red Lamp -> It is charging.

(2) Key Functions

Y Numeric keys

- TEST, CAL, SET Mode :Used to enter numerical data.
- Normal Mode : (1, 2, 3, 4, 5, 6 key) Used to select platform that you wish to display weight

Y CLEAR key : Used to clear erroneous entries in CAL, SET, and TEST mode.

Y ", $\frac{1}{x}$ key

- Used to enter minimum division in CAL mode.

Y ZERO key : Used to remove small variations in the scale's zero.

Y PRINT key : Used to print transactions.

Y SUM key :
Used to print total weight.

Y Truck no. key :
Used to enter truck number.

Y ENTER key :

- Used as an ENTER key.

(3) How to go to TEST mode

Y Press the Truck no. key and ON/OFF key.

(4) How to go to SET mode

Y Press the ENTER key and ON/OFF.

(5) How to go to CAL mode

Y Turn on the power while pressing the ZERO key and then press the TARE key within 1 second.

5.TEST MODE

(1) How to go to Test mode

Press the Truck no. key and ON/OFF key.

(2) Key Functions

Numeric key : Used to enter numerical data.

ENTER key : Used to go to next menu.

(3) Test Menu(TEST 1 - TEST 4)

TEST 1 : Key Test

TEST 2 : LCD Display Test

TEST 3 : Load Cell and A/D conversion Test

TEST 4 : Serial interface and Printer Test

(RS-232)

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Key Test		
Key	Display	Descriptions
ENTER key : Next menu Other key : Perform test	tEst1 1	Press any key to test then code of the key is displayed.

7:067

Display Test		
Key	Display	Descriptions
ENTER key: Next menu	tEst2 88888	Test 2 is performed automatically.

REF 1. You will go to TEST 3 automatically after completing TEST 2.

7:067

A/D Conversion Test (Load Cell Test)		
Key	Display	Descriptions
ENTER key: Next menu	tEst 3 5500	Display shows digital value of current weight. This value means

REF 1. Check whether digital value is changing.If the digital value is fixed or zero is displayed, please check the connection of the load cell.

7:067

Serial Interface and Printer Test		
Key	Display	Descriptions
LIGHT key : Exit test mode Other key : Perform	tEst4 GOOD ERR06	No error in printer Check printer connector

Sample Print out :

TEST OK

6. CALIBRATION MODE

(1) How to go to Calibration Mode

Turn on the power while pressing the ZERO key and then press the TARE key within 1 second.

(2) Key Functions

Numeric key : Used to enter numerical data.
ENTER key : Used to go to next menu.

(3) Calibration Menu(CAL 1 - CAL 5)

CAL 1	:	Set Up Maximum Capacity
CAL 2	:	Set Up Minimum Division
CAL 3	:	Set Up Setting Weight
CAL 4	:	Zero Calibration
CAL 5	:	Span Calibration

Set Up Maximum Capacity		
RANGE ---> 1 < 99,999 kg		
Key	Display	Descriptions
Numeric key : Increase or decrease the number ENTER key : Save and	CAL 1 100 10000	 100 kg 10000 kg

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

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Set Up Minimum Division		
RANGE ---> 0.0005 < 100 kg		
Key	Display	Descriptions
key : Input the next division. (0.001 < 50) ENTER key : Save and	CAL 2 1 0.01	 1 kg 0.01 kg

REF 1. The minimum division means the value of one division.

REF 2. External resolution = One division/Maximum weight

External resolution should be within 1/10,000.

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Setting Weight		
RANGE ---> 1 ~ 99,999 kg		
Key	Display	Descriptions
Numeric key : Increase or decrease the number ENTER key : Save and go to next menu	CAL 3 100 10000	 100 kg 10000 kg

REF 1. The weight should be within the range of 1 % < 100 % of maximum weight.

REF 2. Setting Weight should be bigger than the 10% of Maximum Capacity.

REF 3. Setting Weight should not be bigger than the Maximum Capacity.

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Zero Calibration		
Key	Display	Descriptions
ENTER key: Zero calibration and go to next menu.	CAL 4 UnLoAd ----- GOOD	Remove the weight from the platter and press the ENTER key Under zero calibration Zero calibration is completed.

REF 1.If zero calibration is done without any error, GOOD message is displayed and you can go to CAL 5 automatically.

REF 2.If you want to finish CAL mode, press the SET key after zero calibration.

g\$/

Span Calibration		
Key	Display	Descriptions
ENTER key : Span calibration	CAL 5 LoAd ----- GOOD	Load the weight which was set in CAL 3 and press ENTER key. Under span calibration. Span calibration is completed. Remove the weight and press the ENTER key, you will go to normal

REF 1. If Span calibration is done without any error, GOOD message is displayed

REF 2. If the span is low, Error message (ERR 24) is displayed.

Span calibrate with lower resolution.

7.SET MODE

(1) How to go to Set Mode

Press the ENTER key and ON/OFF.

(2) Key Functions

Numeric key : Used to enter numerical data.

ENTER key : Used to go to next menu.

C key : Used to clear erroneous entries.

(3) Set Menu (F4 ~ F14)

F04 : Digital filter
 F08 : Automatic Back-light
 F12 : RF channel
 F13 : The number of platform
 F14 : Option clock

Designation of the velocity change on weight.		
F08	0	1 Manual Back-light
	1~9	Automatic Back-light
	9	9 : Much to the condition.

Select RF channel (1-4)		
F12	1	1
	4	4

The number of platforms (1-6)		
F13	1	1
	2	2
	6	6

Select option clock		
F14	0	Not used
	1	Used

How to set up date/time (Ex. 2001/3/21 13:10:01)		
	LCD Display	Descriptions
	C1 99	Year : 01
	C2 12	Month : 03
	C3 11	Day : 21
	C4 13	Hour : 13
	C5 10	Minute : 10
	C6 01	Second : 01

8. Weighing Mode

(1) How to go to Weighing Mode

Press the ON/OFF key.

(2) Operations

Key Usage

Numeric Key: 1,2,3,4,5,6...0 key

Used to select where to locate each alphabet or digit.

ex) Press "3" key, the display shows t3.

(It means that you can enter third character of truck number)

↔ Key : The right arrow key is for when used from A to next alphabet, and the left arrow key is for in the reverse direction.

ex)↔ Key : t3 A --> t3 B

↔ Key : t3 B --> t3 A

"... Key : The up arrow key is for when used from 1 to next number, and the down arrow key is for in the reverse direction.

ex)" Key : t3 2 --> t3 3(Increase the number)

... Key : t3 3 --> t3 2(Decrease the number)

1) How to enter Truck No.

You can enter up to 8 digit for truck number.

If you want to enter AB123 for truck number, follow next steps.

KEY	LCD screen	Explanation
Truck No. key		
∅ key	t1	t1: first character
"2" key	t1 A	First character is A
∅ key	t2	t2: second character.
∅ key	t2 A	
"3" key	t2 B	Second character is B.
" key	t3	t3: third character.
"4" key	t3 1	Third character is 1
" key	t4	t4: fourth character
" key	t4 1	
" key	t4 2	Fourth character is 2
"5" key	t5	t5: fifth character.
" key	t5 1	
" key	t5 2	
" key	t5 3	Fifth character is 3.
ENTER key		Save the truck number Exit to weighing mode

9.Error Message and Trouble Shooting

(1) Normal Mode

RFErr

≤ Reason for error

When RW-2601P can't communicate with RW-P in 5 seconds

When RW-P has any problem.

Treatment

After check F12,F13, Turn off and then on.

Err 06

≤ Reason

Error in printer connection

Trouble shooting

Check the printer connector

If there is no problem with printer connector, call your CAS dealer.

Err 08

≤ Reason

ZERO or TARE key does not work because weight is not stable.

Trouble shooting

When the weight is stable press the ZERO or TARE key.

Err 09

≤ Reason

The weight is beyond ZERO key range.

Trouble shooting

Press the ZERO key within ZERO key range.

Err 13

≤ Reason

The zero range deviates from the set range.

Trouble shooting

Confirm that there is nothing on the weighing platform.

If there is nothing on the platform, do calibration in CAL mode.

Over

≤ Reason

Weight is exceed maximum capacity of the scale.

Trouble shooting

Do not exceed the weight limit.

If the load cell is damaged, the load cell should be replaced.

(2) CAL MODE

Err 21

≤ Reason

The resolution is set to be exceeded the limit 1/30,000.

Trouble shooting

Lower the resolution.

The resolution = Maximum weight/one division

Modify the maximum weight in CAL1 or modify the division in CAL2 so that the resolution should be below 1/30,000.

Err 22

≤ Reason

The weight for span calibration is set to be lower than 10 % of the maximum capacity of the scale.

Trouble shooting

Set the weight for span calibration in CAL3 to be more than 10% of the maximum capacity.

Err 23

≤ Reason

The weight for span calibration is set to be exceeded 100 % of the maximum capacity of the scale.

Trouble shooting

Set the weight for span calibration to be within the maximum capacity of the scale in CAL 1.

Notice : Specifications are subject to change for improvement without notice.