Courier 5000

Instruction Manual
Mode d’emploi
Bedienungsanleitung
Manuale di istruzioni
Manual de Instrucciones

TABLE OF CONTENTS

1. INTRODUCTION

This manual contains installation, operation, and maintenance instructions for Courier 5000. This instruction manual helps you to install and use this scale easily. Therefore, you must read it carefully before installation and operation.

1.1. Safety Precautions

Definition of Signal Warnings and Symbols

Safety notes are marked with signal words and warning symbols. These show safety issues and warnings. Ignoring the safety notes may lead to personal injury, damage to the instrument, malfunctions and false results.

Signal Words

WARNING	For a hazardous situation with medium risk, possibly resulting in severe injuries or death if not avoided.
CAUTION	For a hazardous situation with low risk, resulting in damage to the device or the property or in loss of data, or minor or medium injuries if not avoided.
ATTENTION	For important information about the product. May lead to equipment damage if not avoided.
NOTE	For useful information about the product.

Warning Symbols

 General hazard

 Explosion hazard

 Electrical shock hazard

Safety Precautions

CAUTION: Read all safety warnings before installing, making connections, or servicing this equipment. Failure to comply with these warnings could result in personal injury and/or property damage. Retain all instructions for future reference.

- Before connecting power, verify that the equipment's input voltage range and plug type are compatible with the local AC mains power supply.
- Do not position the equipment such that it is difficult to reach the power connection.
- Make sure that the power cord does not pose a potential obstacle or tripping hazard.
- Operate the equipment only under ambient conditions specified in these instructions.
- The equipment is for indoor use only.
- Do not operate the equipment in wet, hazardous, or unstable environments.
- Do not allow liquids to enter the equipment.
- Do not load the equipment above its rated capacity.
- Do not drop loads on the platform.
- Do not place the equipment upside down on the platform.
- Use only approved accessories and peripherals.
- Disconnect the equipment from the power supply when cleaning.
- Service should only be performed by authorized personnel.

WARNING: Never work in an environment subject to explosion hazards! The housing of the instrument is not gas tight. (Explosion hazard due to spark formation, corrosion caused by the ingress of gases).

WARNING: Electrical shock hazards exist within the housing. The housing should only be opened by authorized and qualified personnel. Remove all power connections to the unit before opening.

1.2. Intended Use

This instrument is intended for use in pharmacies, schools, businesses and light industry. It must only be used for measuring the parameters described in these operating instructions. Any other type of use and operation beyond the limits of technical specifications, without written consent from OHAUS, is considered as not intended. This instrument complies with current industry standards and the recognized safety regulations; however, it can constitute a hazard in use. If the instrument is not used according to these operating instructions, the intended protection provided by the instrument may be impaired.

1.3. Overview of Controls

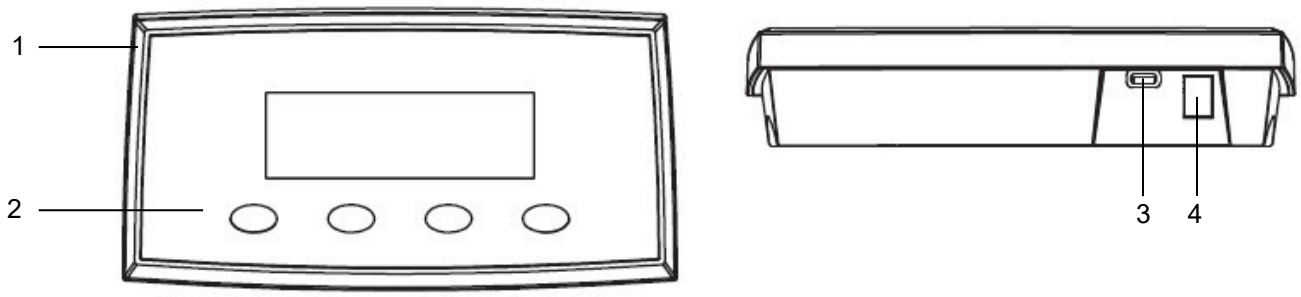


Figure 1-1 Courier 5000

Item	Description	Item	Description
1	Front housing	3	USB Type-C connector
2	Control panel	4	Load cell cable connector

1.4. Control Functions

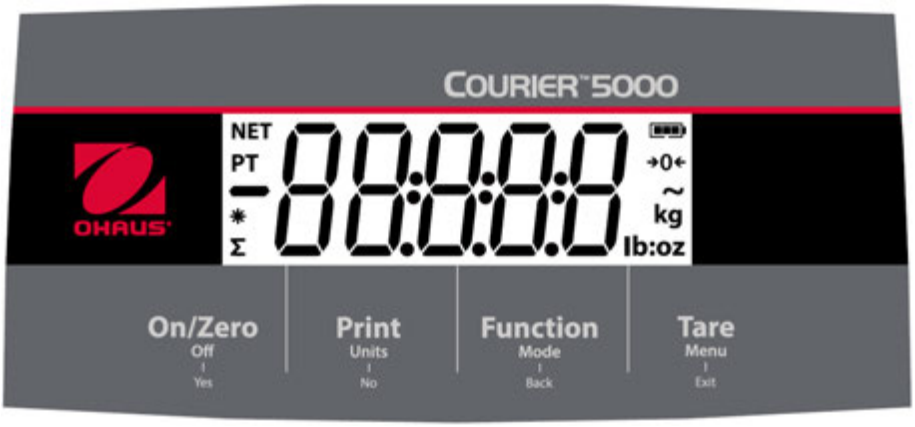


Figure 1-2 Courier 5000 Control Panel

Button	On/Zero (Off / Yes)	Print (Units / No)	Function (Mode / Back)	Tare (Menu / Exit)
Primary Function (Short Press)	**On/Zero** If the scale is off, short press to turn on the scale. If the scale is on, short press to set the display value to zero.	**Print** If enabled, the current display value can be transmitted to the interface port.	**Function** This key initiates the specific function in different application modes.	**Tare** Performs a tare operation.
Secondary Function (Long Press)	**Off** If the scale is on, long press to turn off the scale.	**Units** Changes the weighing unit.	**Mode** Changes the application mode.	**Menu** Enters the user menu.
Menu Function (Short Press)	**Yes** Selects the current setting on the display or goes into a sub-menu.	**No** Moves to the next menu or menu item. Rejects the current setting on the display and moves to the next available one.	**Back** Moves back to the previous menu item.	**Exit** Exits the user menu. Aborts a calibration in progress.

NOTE:

- Short Press: Press the key less than 1 second.
- Long Press: Press and hold the key for more than 3 seconds.

Figure 1-3 Display

Item	Description	Item	Description
1	Net weight symbol	6	Pound, Ounce, Pound: Ounce symbols
2	Preset Tare symbol	7	Kilogram, gram symbols
3	Negative symbol	8	Dynamic Weighing / Display Hold mode symbol
4	Stable weight symbol	9	Center of Zero symbol
5	Accumulation symbol	10	Battery symbol

2. INSTALLATION

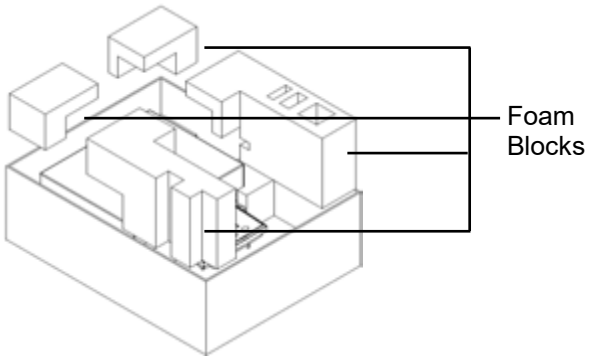
2.1 Packing List

Item	Description	Picture	Quantity
1	Base		1
2	Terminal		1
3	Coiled cable		1
4	Brackets		2
5	Screws		8
6	AC adapter		1
7	USB cable		1

2.2 Unpacking the Scale

Steps

1. Take out the documents, USB cable, terminal, AC adapter, load cell cable and brackets, then put them to the side.
2. Remove the foam blocks.
3. Take the Courier 5000 scale base out of the box and put it on a stable surface.
4. Connect the terminal to the scale base with the load cell cable.



2.3 Setup

2.3.1 Power Supply Connection

The Type-C cable and the AC adapter can supply power to the scale.

USB Power

1. Use the Type-A end of the USB cable to connect to the PC.
2. Use the other side of the USB cable to connect to the terminal's USB port.

AC Adapter Power

1. Use the Type-A end of the USB cable to connect to the AC adapter.
2. Use the other side of the USB cable to connect to the terminal.
3. Plug the AC Adapter into the electrical outlet.

Dry Battery Power

3 AA size dry batteries (not included) can supply power to the scale.

1. Loosen the 2 screws on the terminal mounting bracket to remove the terminal.
2. Open the battery compartment door at the bottom of the terminal.
3. Install the batteries in the battery compartment.
4. Close the battery compartment door.
5. Reinstall the terminal on bracket.

The battery symbol indicates the battery status:

 Battery 0%-10% remaining

 Battery 41%-70% remaining

 Battery 11%-40% remaining

 Battery 71%-100% remaining

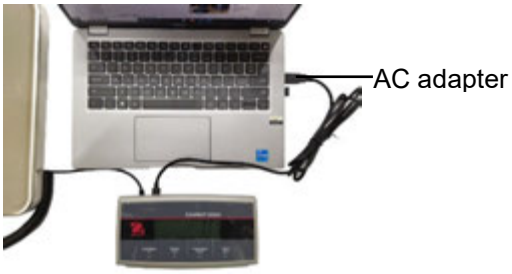
2.3.2 PC Connection

USB to PC

If you connect a USB cable to the PC, it allows USB communication with the PC.

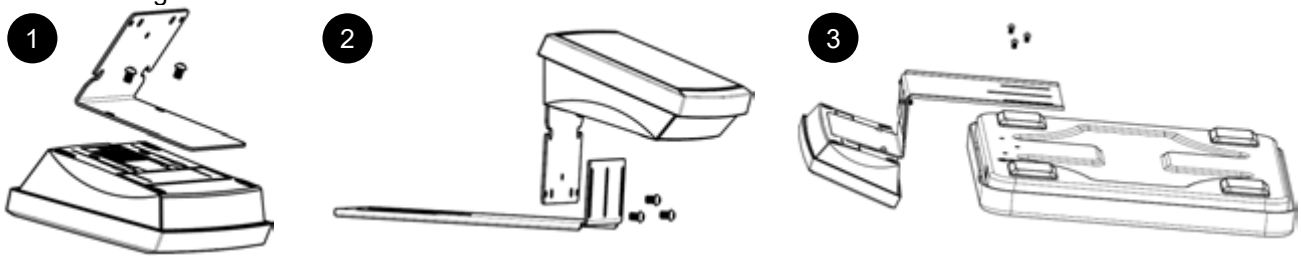
NOTE: The USB cable to a PC connection can supply power to the scale as well.

1. Use the Type-A end of the USB cable to connect to the PC.
2. Use the other side of the USB cable to connect the terminal through the mounting hole in the bracket.

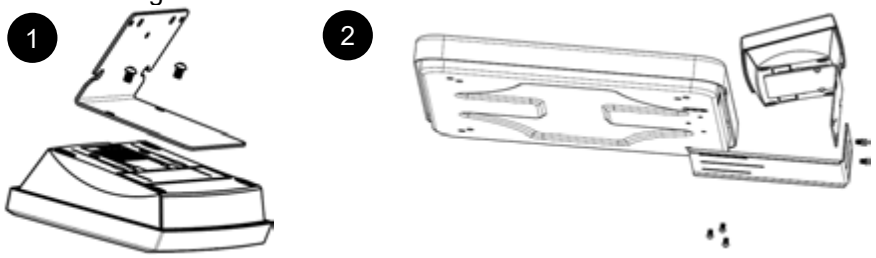


2.3.3 Base Mounting

Front mounting:



Rear mounting:



2.3.4 Direct Wall Mounting

The terminal may be mounted directly to a wall or table using two screws (not included). Select appropriate size screws that fit into the holes at the bottom of the terminal housing. See **Figure A**. When mounting to a wall without a solid backing, use appropriate anchoring hardware.

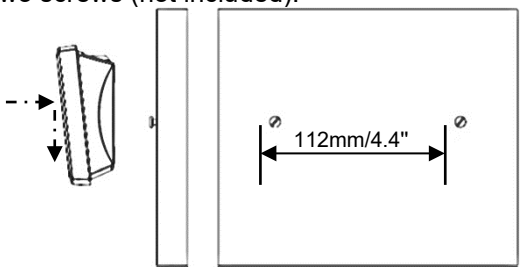


Figure A. Direct Wall Mount Arrangement

2.4 Leveling the Equipment

Place the scale on a firm and stable flat surface and avoid excessive airflow, vibration, heat sources, or rapid temperature changes. Afterwards, rotate the scale feet for leveling (only for L and X models).

3. OPERATION

3.1 Turning On/Off the Scale

To turn on the scale, press the **On** button. The scale performs a display test, and momentarily displays the software version, the GEO value and then enters the last active weighing mode.

To turn the scale off, long press the **Off** button until **OFF** is displayed.

3.2 Setting the Display to Zero

The value of the display can be set to zero under the following conditions:
1. Automatically at Power On (Initial zero).
2. Manually press the **ON/ZERO Off** button.
3. Semi-automatically send the **Zero** command (Z or alternate zero command) by USB connection to a PC.

Before pressing the **ON/ZERO Off** button, please make sure that the scale is stable.

3.3 Changing the Units of Measure

To change the weighing unit, long press the **Print Units** button until the desired weighing unit appears on the display.
NOTE: If the desired weighing unit is not shown, check if the unit is activated in the Unit menu (See section 4.5 Unit Menu).

3.4 Printing Data

Before you print out the displayed data with a printer or sending the data to a computer, please set the communication parameters in the **Print Menu** (Refer to 4.7 Print Menu).

Press the **PRINT Units** button for sending the displayed data to the communication port.

3.5 Application Modes

Activating / Deactivating the Application Mode

1. Long press the **Menu** button until **mM.E.N.U** appears on the display.
2. Release the **Menu** button, and **C.A.L** appears on the display.
   NOTE: **C.A.L** does not appear if CAL LOCK is on.
3. Short press the **No** button several times until **mM.O.d.E** appears on the display.
4. Press the **Yes** button to enter the required application mode.
5. Short press the **No** button several times until the desired selection appears on the display.
6. Press the **Yes** button, and **ON** appears on the display. If you want to activate the application mode, short press the **Yes** button. If you want to deactivate the application mode, short press the **No** button until **OFF** appears on the display, then short press **Yes** button.
7. Press **mM.E.N.U** button once to exit.

3.5.1 Weighing

This mode is the default factory setting, and it is used to determine the weight of the loads in the selected unit of measure.

Entering the Mode and Starting to Weigh

1. Long press the button **Function Mode** until **wWEIG** appears on the display.
2. Put the container on the scale. Once the value is stable, "*" will appear on the display.
3. Press the button **Tare** to tare. If the scale performs well, the value on the display is 0.
4. Put the load on the container and read the weight value of the load from the display. Once the value is stable, "*" will appear on the display.

NOTE: You can check the value of the tare weight by long pressing the **Tare** button.

The Weighing configurations are defined below (Defaults in Bold).

Item	Available Settings	Comments
Weighing (wWeIG)	**On**, off	To enable or disable Weighing

NOTE: The Weighing mode cannot be disabled if the scale is in the Weighing mode currently.

3.5.2 Totalization

This application is used to accumulate multiple weights manually or automatically. Statistical data (the number of samples, the total weight, the average weight, the minimum weight, the maximum weight and the difference in weight) is stored in memory for review and printing.

Application Settings

There are three totalization options:

Off (**OFF**): Disable the totalization function.

Manual (**mMAN**): ` Enable the totalization function manually with **Function** button.

Automatic (**AUtO**): The scale performs the totalization function automatically.

NOTE: Manual is the default setting.

Selecting the Totalization Options:

1. Long press the **Menu** button until the **mM.E.N.U** appears on the display.
2. Release the **Menu** button, the **C.A.L** appears on the display.
3. Short press the **No** button several times until **mM.O.d.E** appears on the display, then press the **Yes** button. If you do it successfully, you can see the **reset** on the display.
4. Short press the **No** button several times until **t0tal** appears on the display, then press **Yes** button to enter the sub menu.
5. Short press the **No** button several times to select the desired totalization option. If the desired option appears on the display, you can press **Yes** button to confirm.
6. Press the **Exit** button to exit.

Starting the Totalization Process

1. Long press the **Mode** button until **tOtAL** appears on the display.
2. Release the **Mode** button, and the **CL.ACC** appears on the display.
3. Refer to the explanations below to determine whether to press **Yes** or **No** button.
   - To delete the stored totalization result of the last time for a new round of the totalization process, you can press the **Yes** button. The display shows **0.000**.
   - To reuse the stored totalization result of the last time, you can press the **No** button to continue the totalization of the last time. The display shows **0.000**.

   If there is a container on the scale, the display shows **CL.PAN** until the container is removed or you can press the **Tare** button to tare.
4. Put the object on the platform and wait for the "∑" flashes on the display.
   NOTE: Please make sure that the object weight is greater than 5d.
5. Remove the object from the platform.
6. Put the next object on the platform and wait for the "∑" flashes on the display.
7. Steps 5 and 6, if you have more than two objects that need to be weighed.
8. Remove all the objects from the platform.
9. Press **Function** button to check the result.

NOTE:

- The gross and net weight cannot be added to the same total. If the first weight is recorded in gross, the next one should be recorded in the same way. It is the same for the net weight.
- The result includes the number of samples, the total weight, the average weight, the minimum weight, the maximum weight, and the difference in weight (the maximum weight minus the minimum weight). The values are displayed for 1 second each.

Totalization Rules

You will fail to do the totalization operation under the following conditions.

1. The current weight value is unstable.
2. The net weight of the load is smaller than 5d.
3. The overall totalized weight is larger than 999999.（The unit depends on your setting.）
4. The total number of totalizations exceeds 9999 times.

Printing Totalization Results and Format

1. Refer to the steps below, you can enable the Table on (**tABLE**) option in the menu.
   a) Long press the **Menu** button until you see **mM.E.N.U**.
   b) Release the **Menu** button and **C.A.L**. appears on the display if CAL lock is off.
   c) Short press the **No** button several times until **mM.O.d.E** appears on the display.
   d) Press the **Yes** button to enter the sub menu.
   e) Short press the **No** button several times until **tABLE** appears on the display, then press the **Yes** button to enter the table setting options.
   f) Short press the **No** button until **On** appears on the screen.
   g) Press the **Yes** button to confirm.
   h) Press the **Exit** button to exit.

2. When the Table option is enabled.
   - In automatic totalization mode, the scale will automatically totalize the current weight when it performs totalization successfully.
   - In manual totalization mode, you can press the **Function** button to totalize the current weight and print it accordingly.

3. The output for current weight will appear as the example below.
   Example:

```
1.      1000 g N
2.      2000 g N
3.      3000 g N
4.      1999 g N
5.      1000 g N
------------------------
```

4. When the totalization is finished, you can print the totalization result by below steps.
   1. Remove the load from the scale.
   2. Press the **Function** button, and the totalization result appears on the display.
   3. Press the **Print** button to print the result.

   Refer to the example below, you will see the output of the totalization result.
   Example:

```
------------------------
n:              5
Total:      100.000 g
Avg:        200.000 g
Min:        10.500 g
Max:        88.200 g
Diff:       78.300 g
```

   NOTE: The scale supports 32 characters, the first line is "-". The colon is left aligned, and the Weights/Numbers are right aligned.

3.5.3 Dynamic Weighing / Display Hold

This application is used to weigh an unstable load, such as a moving animal. Three different start/reset operation types can be selected:

Off (**OFF**)	= Disable the mode.
Manual (**mMAN**)	= Averaging and resetting are initiated manually by pressing the **FUNCTION** key.
Semi-Automatic (**SEmMI**)	= Averaging is automatically initiated when the load weight is bigger than the start weight; resetting is initiated by pressing the **FUNCTION** key.
Automatic (**AUtO**)	= Averaging is automatically initiated when the load weight is bigger than the start weight; resetting is automatically initiated when the weight on the display is less than 5d.

Display Hold

The C52 is set to Display Hold as a default. The instrument will hold the displayed weight value on the display if that weight is greater than 5 divisions.

NOTE: The minimum start weight is 5 divisions. If the scale does not operate properly, please check if the load is greater than 5 divisions.

Starting the Dynamic Weighing/Display Hold Mode:

1. Long press the button **Function Mode** until **dyNa** appears on the display.
2. Release the button **Function Mode**, and **rEAdY** appears on the display.
3. Put the load on the platform.
   - If the operation type is manual, you must press the **Function** button to start the averaging process.
   - If the operation type is semi-automatic/automatic, the scale performs the averaging process automatically when the load weight is bigger than the start weight.

   NOTE:
   - You can set the value of the start weight via this path: **mMENU** > **mM.O.d.e** > **dyNa**> **StArt**. And the correct range of the start weight value is 5d - capacity value.
   - During the averaging period, the countdown timer decreases in one second increments. If the set average time is 0s, the countdown timer is not displayed.
   - The values on the display are averaged and held on the display when the countdown is completed.
4. Read the values on the display if the tilde (dynamic) symbol blinks on the display.
5. Reset the countdown timer:
   - If the operation type is manual/semi-automatic, press the **Function** button to reset the countdown timer when the countdown is running. The display shows **rEAdY** and start to re-count.
   - If the operation type is automatic, remove the load from the scale. And the average weight will still be displayed until the duration time is over. Then the display shows **rEAdY**, and start to re-count.

   NOTE:
   - The **rEADY** display must be at zero gross or net value to reset the countdown timer.

Application Settings

The Dynamic Weighing Configurations are defined below (Defaults in Bold).

Item	Available Settings	Comments
Dynamic Mode （**dyNA**）	**Off** (**OFF**) / on (**On**)	**Count down**: There is a countdown time.
Dynamic Operation Type (**tyPE**)	Manual (**mMAN**)/ **Semi-auto** (**semMI**)/ Auto (**AUtO**)	**Manua**l: The averaging process is started and reset manually. **Semi-auto**: The averaging process is started automatically and reset manually. Resetting is initiated by pressing the **FUNCTION** key. **Auto**: The averaging process is started and reset automatically.
Start Weight (**StArt**)	**5d** - Capacity Weight	Dynamic weighing will start when the load is bigger than the start weight (for Semi-auto and Auto mode).
Duration Time (**dUrAt**)	1 - **10 s**	Duration time of weighing result after the load is removed (only for AUTO type).
Average Time (**AuErA**)	**0** - 30 s	Time in Seconds. If the average time is 0, the first stable weight (more than or equal to 5d) will be the result.

NOTE: The Dynamic mode cannot be disabled if the scale is in the Dynamic mode currently.

3.5.4 Weight Alert

This application is used to judge if the weight of the item is within the target limit. There are 2 limit values for setting, the limit 1 is normally on as default.

Setting the Limit Values

1. Long press the **Mode** button until **ALert** appears on the display.
2. Release the **Mode** button, the **CL.ALe** appears on the display.
3. Press **Yes** button to remove the stored alert limit value, and **LimM.1** appears on the display.
4. Press **Yes** button, 000000 flashes on the display with the current unit.
5. Set the limit value 1:
   a) Use the buttons **NO** and **Back** to set a number for the first digit.
   b) Short press the **Yes** button to confirm the number and move to the next digit.
   c) Repeat the steps a) and b) to set numbers for all the digits.
   d) Press **Yes** button to confirm the value. If the value is not in the correct range, the **NO** appears on the display, then the display shows **LimM.1**. You must repeat the steps 4 and 5 to set the value. If the value is in the correct range, the **LimM.2** appears on the display.

      NOTE: If the **LimM.2** is set to off, the **LimM.2** will not appear on the display and the scale goes into the weighing status directly.
6. Redo steps 4 and 5 to set the limit value 2.

   If the limit value 2 is not in the correct range, **NO** appears on the display, then the display shows **LimM.1**. Please redo step 5.

   If the limit value 2 is in the correct range, the scale goes into the weighing status.

NOTE:

1. You can check the limit values by short pressing the **Function** key.
2. You can set either or both limit values. When limit value 2 is on and limit value 1 is not equal to limit value 2. If the object weight value is between the two limit values, the segment text and the backlight blink together. If the object weight value is larger than the maximum limit value, the segment text blinks.

   If the weight value of the load is larger than both the limit values, the segment text blinks.

3. The maximum limit value is not larger than the capacity value (Refer to **Table 8-1** for the capacity value of all models).

4. MENU SETTINGS

The User Menu allows the users to customize the scale settings.

4.1 Menu Navigation

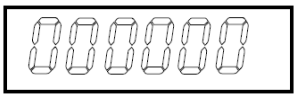
4.1.1 User Menu

C.A.L	S.E.t	r.E.A.d	mM.O.d.E	U.N.I.t	U.S.B	P.r.N.t	l.O.C.k	E.N.d
ZErO	reset	reset	reset	reset	reset	reset	reset	
SpaN	PwWr.U	Stab	wWeIG	UNIt g	BaUd	ASSIG	ALL	
LIN	ENd	ZErO	tOtal	UNIt kg	ParIt	StaBl	OFF	
GEO		FIlt	tAbLE	UNIt oz	StOP	CONtE	ZErO	
ENd		AZt	DYNA	UNIt lb	SHAkE	LAYOt	PrINt	
		LIGHt	type	UNIt lb:oz	Alt.P	ENd	UNIt	
		A-Off	StArt	ENd	Alt.t		mMOdE	
		PwWmM	durAt		Alt.2		mMENU	
		Lock	AuErA		ENd		tArE	
		ENd	AleAt				ENd	
			LimM2					
			ENd					

4.1.2 Button Navigation

For menu items which need to set numbers such as the Weight Alert, the current number is displayed with all digits flashing. To revise:

1. Press the **No** button to begin editing.



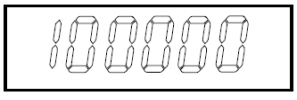
2. The first digit is displayed flashing.

3. Press the **No** button to increase the digit or press the **Yes** button to accept the digit and move to the next one.
   NOTE: press the **Back** button can decrease the digit.

4. Repeat this process for all digits.

5. Press the **Yes** button when the last digit has been set.

6. The new setting is displayed with all digits flashing. Press the **Yes** button to accept the setting or press the **No** button to resume editing.



7. To end the current menu selection, press the **Yes** button to advance to the next menu, or press the **No** button to return to the top of the current menu.

4.2 Calibration Menu

The scale can be calibrated using the calibration menu **C.A.L.**

Changing the Calibration Unit

The calibration unit is consistent with the current unit.

Steps:

1. In the weighing mode, long press the **Units** key. At this time, the screen will display a continuous series of units.
2. Release the **Units** key when the desired unit is displayed on the screen.

4.2.1 Initial Calibration

When the scale is operated for the first time, a zero and span calibration are recommended to ensure accurate weighing results.

Before performing the calibration, be sure to have the appropriate calibration weights as listed in table 4 - 1.

You can also adjust the GEO setting according to your location. For detailed GEO information, please check the **GEO Code Adjustment** section below.

Table 4-1 Suggested Span Calibration Mass (Sold Separately)

Max Capacity (kg)	Mass* (kg)
6kg	6kg
30kg	30kg
50kg	50kg
100kg	100kg
200kg	200kg

Max Capacity (lb)	Mass* (lb)
12lb	10lb
60lb	60lb
100lb	100lb
200lb	200lb
400lb	400lb

NOTE: The calibration unit is consistent with the current unit.

4.2.2 Zero Calibration

The scale performs zero calibration with one calibration point. The zero-calibration point is established with no weight on the scale. You can use this calibration method to adjust for a different static load without affecting the span or linearity calibration.

Calibration Procedures:

1. Long press the **Menu** button until you see **mM.E.N.U**.
2. Release the button and wait for the display to show **C.A.L**.
3. Press the **Yes** button. And you can see the display shows **ZErO**.
4. Press the **Yes** button. The display shows **--C--**, and then **-DonE-** when the Zero calibration is finished. The display shows **SPAN**.

   NOTE: If zero calibration fails or if after 40 seconds the calibration is still not successful, **CAL E** is displayed for 3 seconds and the previous calibration data will be restored.
5. Press the **Exit** button to exit.

4.2.3 Span Calibration

The scale performs span calibration with one calibration point. It is established with a calibration mass placed on the scale.

NOTE: Span calibration should be performed after zero calibration.

Calibration Procedures:

1. Long press the **Menu** button until you see **mM.E.N.U**.
2. Release the button and wait for the display to show **C.A.L**. Press the **Yes** button.
3. Short press the **No** button to navigate until you see **SPAN**. Press the **Yes** button.
4. The calibration point and the unit flashes on the display based on the scale capacity and unit set in the menu. (e.g. 030.000 kg) If you do not need to change the calibration point, skip to step 6.
5. To change the calibration point:
   a) Short press the **No** button several times until the desired number appears.
   b) Short press the **Yes** button to accept the number and move on to the next digit.
   c) Repeat the process until all the digits are correct.
   d) Press the **Yes** button to accept calibration point. It is flashing on the display.
6. Place a calibration mass of the specified weight on the platform and press the **Yes** button.
7. The display shows **--C--**, and then **-DonE-** when the calibration is finished.
8. Then the display shows **LIN**. Press the **Exit** button to exit.

NOTE:

- If the scale does not perform the calibration successfully, **CAL E** is displayed for 3 seconds and the previous calibration data is restored.
- After waiting for 40 seconds, if the scale still fails to perform the calibration, **CAL E** is displayed for 3 seconds, and the previous calibration data is restored.

4.2.4 Linearity Calibration

The scale performs linearity calibration with 3 calibration points. The full calibration point is established with an item (Refer to **Table 4-1** for the exact weight value of the item) on the platform. The mid calibration point is established with a weight equal to half of the full calibration weight on the platform. The zero calibration point is established with no weight on the platform. The full calibration and mid calibration points can be altered during the calibration procedure.

Calibration Procedures:

1. Long press the **Menu** button until you see **mM.E.N.U**.
2. Release the button and wait for the display to show **C.A.L**. Press the **Yes** button.
3. Short press the **No** button several times to navigate until you see **LIN.**
4. Press the Yes button, then the display shows **--C--**.
5. Then the first calibration point and the unit will flash on the display based on the scale capacity and unit you set in the setup menu. (For example, **015.000** kg). If you do not need to change the calibration point, skip to step 7.
6. Change the calibration point:
   a) Short press the **No** button several times until the desired number appears.
      NOTE: press the **Back** button can decrease the digit.
   b) Short press the **Yes** button to accept the number and move on to the next digit.
   c) Repeat the process until all the digits are correct.
   d) Press the **Yes** button to accept calibration point. It flashes on the display.
7. Place a calibration mass of the specified weight on the platform and press the **Yes** button. The display shows **--C--**.
8. The second calibration point and the unit will flash on the display based on the capacity and unit you set in the setup menu. (For example, **030.000** kg)

   NOTE: After waiting for 40s, if the scale still fails to perform the calibration, **CAL E** is displayed for 3 seconds and the previous calibration data is restored.
9. Steps 6 and 7.
10. The display shows **--C--**, and then **-DonE-** when the Linearity calibration is finished.
11. After that the display shows **GEO**. Press the **Exit** button to exit.

4.2.5 GEO Code Adjustment

Geographical Adjustment Factor (GEO) code is used to adjust the calibration based on the current location. Settings from 0 to 31 are available with 12 being the default. Refer to **8.3 Table of GEO Code Values** to determine the GEO factor that corresponds to the terminal's location.

Set the GEO factor:

1. Long press the **Menu** button until you see **mM.E.N.U**.
2. Release the button and wait for the display to show **C.A.L**. Press the **Yes** button.
3. Short press the **No** button several times to navigate until you see **GEO**. Press the **Yes** button.
4. The GEO point flashes on the display (For example, **12**).
5. Short press the **No** button several times until the desired GEO number appears. Press the **Yes** button to confirm.
   NOTE: Press the **Back** button can decrease the digit.
6. Then the display shows **END**.
7. Press the **Exit** button to exit.

4.2.6 End Cal

When **ENd** is displayed, you can press the **Yes** button to exit this menu and enter the next sub-menu, or press the **No** button to enter to the first menu item in this sub-menu.

4.3 Setup Menu

You can set the scale parameters with the menu **S.E.t**. Default settings are in **bold**.

Menu	Sub-Menu	Sub-Menu (in segment)	Options	Options (in segment)
Setup S.E.t.	Reset	reset	**no**, yes	**NO**, yes
	Power On Unit	PwWr.U	**Auto**, g, kg, lb, oz, lb:oz	**AUtO**, g, kg, lb, oz, lb:oz
	End	ENd	/	/

NOTE: / indicates that it is not applicable in the table above.

Reset
Reset the Setup menu to factory defaults.

NO = do not reset

yes = reset

Power On Unit
Set the unit in the weighing mode after rebooting.

AUtO = After rebooting, the weighing unit will be the previously-selected unit.

g, kg, lb, oz, lb:oz = After rebooting, the selected weighing unit in the menu will be used regardless of previously selected unit.

NOTE: The unit will not appear unless they are set to on in the unit menu.

End
The display exits the current menu and moves to the next menu.

4.4 Readout Menu

You can set the user preferences with the readout menu. Default settings are in **bold**.

Menu	Sub-Menu	Sub-Menu (in segment)	Options	Options (in segment)
Read Out (r.E.A.d)	Reset	reset	**no**, yes	**NO**, yes
	Stability	Stab	.5d, **1d**, 2d, 5d	.5d, **1d**, 2d, 5d
	Zero Range	ZErO	2%, **100%**	2, **100**
	Filter Level	FIlt	Low, **Medium**, High	LOwW, **mMEd**, HIGH
	Auto Zero Track	AZt	Off, 0.5d, **1d**, 3d	OFF, .5d, **1d**, 3d
	Back Light	LIGHt	Off, On, **Auto**	OFF, On, **Auto**
	Auto Off	A-Off	**Off**, 1min, 5min, 10min	**OFF**, 1, 5, 10
	PWM.SAVE	PwWmM	ON, **OFF**	**On**, OFF
	Calibration Lock	Lock	ON, **OFF**	On, **OFF**
	End	ENd	/	/

NOTE: / indicates that it is not applicable in the table above.

Reset
Reset the readout menu to factory defaults.

NO **= do not reset.**

YES = reset

Stability
Set the amount reading can vary before the stability symbol turns off.

.5d = 0.5 of a scale division

1d **= 1 scale division**

2d = 2 scale divisions

5d = 5 scale divisions

Zero
Set the percentage of scale capacity that can be zeroed.

2% = zero range is within +/-2%
100% = zero range is within +/-100%

Filter
Set the amount of signal filtering.
LOwW = faster stabilization time with less stability.
mMEd = normal stabilization time with normal stability.
HIGH = slower stabilization time with more stability.

AZT
Set the automatic zero tracking feature.
OFF = disabled
.5d = the display will maintain zero until a change of 0.5 divisions per second has been exceeded.
1d = the display will maintain zero until a change of 1 division per second has been exceeded.
3d = the display will maintain zero until a change of 3 divisions per second has been exceeded.

Backlight
Set the display backlight feature.
OFF = backlight is disabled.
On = backlight is enabled and always on.
Auto = backlight is disabled after 20 seconds of no activity.

Auto Off
Set whether the display enters sleep mode after the selected time period.
OFF = disabled
1 = the display enters sleep mode after 1 minute of no activity.
5 = the display enters sleep mode after 5 minutes of no activity.
10 = the display enters sleep mode after 10 minutes of no activity.

PWM.SAVE
Set whether to enable power saving mode after the scale enters standby mode. If it is enabled, it will take about 3 seconds before the terminal returns to weighing when weight is changed on the platform or you press the terminal's buttons.
On = power saving is enabled.
OFF = power saving is disabled.

Calibration Lock
There are two options for the setting of Calibration Lock, namely ON and OFF. Please refer to the table below for details.

Menu	Sub-menu	Calibration Lock is OFF	Calibration Lock is ON
Calibration Menu	Zero Calibration	Activated	Hidden
	Span Calibration	Activated	Hidden
	Line Calibration	Activated	Hidden
Setup Menu	Power on unit	Activated	The current unit is locked
Readout Menu	Zero range	Activated	The current value is locked at 2%.
	Auto zero tracking	Activated	The current value is locked at 0.5d.
	Stable Range	Activated	The current value is locked at 1d.
Unit Menu	Reset, g, kg, lb, oz, lb:oz	Activated	The current setting is locked.
Print Setup Menu	Stable only printing	Activated	On is locked

NOTE: The CAL lock cannot be reset by resetting the Readout menu. Please set the CAL lock to OFF manually.

End Readout
Advance to the next menu or return to the top of the current menu.

4.5 Unit Menu

You can activate the desired units with the menu **U.N.I.t**.

Reset
Gram (g)
Kilogram (kg)
Pound (lb)
Ounce (oz)
Pound:Ounce (lb:oz)
End
NOTE: Available units vary by model. In addition, due to national laws, the scale may not include some of the units listed.

4.6 USB Menu

You can define the communication parameters with this menu. Factory default settings are shown in **bold**.

Menu	Sub-Menu	Sub-Menu (In segment)	Options	Options (in segment)
USB (U.S.b)	Reset	reset	**no**, yes	**NO**, yes
	Baud Rate	BAUd	600, 1200, 2400, 4800, **9600**, 19200	/
	Parity	PArIt	7-Even, 7-Odd, **8-None**	7-EuE, 7-Odd, **8-NOE**
	Stop Bit	StOP	**1 bit**, 2 bit	**1 bit**, 2 bit
	Handshake	SHAKE	**None**, Xon/Xoff	**NONe**, On.OFF
	Alt Print CMD	ALt.P	'A' - 'Z', **P**	/
	Alt Tare CMD	ALt.t	'A' - 'Z', **T**	/
	Alt Zero CMD	ALt.Z	'A' - 'Z', **Z**	/
	End	ENd	/	/

NOTE: / indicates that it is not applicable in the table above.

Reset
Reset the RS232 menu to factory defaults.
NO = do not reset.
YES = reset

Baud Rate
Set the baud rate (bits per second).
600 = 600 bps
1200 = 1200 bps
2400 = 2400 bps
4800 = 4800 bps
9600 = 9600 bps
19200 = 19200 bps

Parity
Set the data bits and parity.
7-EuE = 7 data bits, even parity
7-ODD = 7 data bits, odd parity
8-NOE = 8 data bits, no parity

Stop Bit
Set the number of stop bits.
1 bit = 1 stop bits
2 bit = 2 stop bits

Handshake
Set the flow control method. Hardware handshaking is only available for COM1 menu.
NONE = no handshaking
On.OFF = XON/XOFF software handshaking

Alternate Print command
Set the alternate command character for Print.
Settings of A (a) to Z (z) are available. The default setting is **P**.

Alternate Tare command
Set the alternate command character for Tare.
Settings of A(a) to Z(z) are available. The default setting is **T**.

Alternate Zero command
Set the alternate command character for Zero.
Settings of A (a) to Z (z) are available. The default setting is **Z**.
NOTE: Setting of **P**, **T** and **Z** are not available in more than one command options.

End
Advance to the next menu or return to the top of the current menu.

4.7 Print Menu

You can set the parameters with the Print menu. Default settings are in **bold**.

Menu	Sub-Menu	Sub-Menu (In segment)	Options	Options (In segment)
Print (P.r.N.t)	Reset	reset	**no**, yes	**NO**, yes
	Assignment	ASSIG	**Demand**	**DemMa**
			Auto On Stable	On.Sta
			Accept	ACept
			Interval(seconds)	INter
			MT-Continuous	mMt.CO
			OH-Continuous	OH.CON
			UPS	UPS
	Mode	mMODE	**Load**, Load and Zero	**LOAD**, LOA2E
	Stable Weight Only [Demand]	Stabl	**Off**, On	**OFF**, On
	Content	CONte	**Result**, Gross, Net, Tare, Header, Footer, Mode, Unit, Info	**resUl**, GrOSS, Net, tArE, HEAdE FOOtE, mMOdE, UNIt, INFO
	Layout	LAYOt	**Format**, Feed	**FrmMt,** FEEd
	End	ENd	/	/

NOTE: / indicates that it is not applicable in the table above.

Reset
Reset the Print menu to factory defaults.
NO = do not reset
YES = reset

Assignment
Demand **=** printing occurs when **Print** key is pressed.
If **Demand** is selected, the sub-menu **Stable Only** will display.

Auto On Stable= printing occurs each time the stability criteria are met.
If **Auto On Stable** is selected, the sub-menu **Mode** will display.

Accept
If **Accept** is selected and the weighing mode is **Alert**, values will be printed when the weight is accepted.
ACept = printing occurs each time the display is within the Alert range and stability criteria is met.

Interval
If **Interval** is selected, the sub-menu **Time** will display.
IntEr = printing occurs at the defined time interval.

Settings of 1 to 5000 seconds are available. Default is 1. Printing occurs at the defined time interval.

MT-Continuous

Continuous = printing occurs continuously.
If MT-Continuous is selected, the print output will be in the MT-Continuous format.
mMt.CO = printing occurs continuously.
NOTE: Refer to **10.1 MT Standard Continuous Output** for MT-Continuous format.

OH-Continuous
If OH-Continuous is selected, the print output will be in the OH-Continuous format.
NOTE: Refer to **10.3 OH-Continuous Print** for OH-Continuous format.
OH.CON = printing occurs continuously.

UPS
Courier 5000 scale can be compatible with UPS WorldShip software when UPS is selected.

Mode
Set the printing conditions.
LOad = prints when the displayed load is stable.
LOA2E = prints when the displayed load and zero reading are stable.

Stable Only
Set the printing criteria.
OFF = values are printed immediately, regardless of stability.
On = values are printed only when the stability criteria is met.

Content

Define the content of the printed data.

Result
Set the status.
OFF = disabled
On = the displayed reading is printed

Gross
Set the status.
OFF = disabled
On = the gross weight is printed

Net
Set the status.
OFF = disabled
On = the net weight is printed

Tare
Set the status.
OFF = disabled
On = the Tare weight is printed

Header
Set the status.
OFF = disabled
On = the Header is printed
NOTE: Refer to 10.2 OHAUS Commands, you will know how to enter the header line.

Footer
Set the status.
OFF = disabled
On = the Footer is printed

Mode
Set the status.
OFF = disabled
On = the Mode is printed

Unit
Set the status.
OFF = disabled
On = the Unit is printed

Info
Set the status.
OFF = disabled
On = the reference information is printed (ex. Alert limits)

Layout
Set the format of the data output to a printer or computer.

Format
Set the printing format.
mM = a multi-line (single column style) printout is generated.
S = a single line printout is generated.

Feed
Set the paper feed.
LINE = move a paper up one line after printing.
4LF = move a paper up four lines after printing.
FormM = a form feed is appended to the printout.

End Print
Move to the next menu or return to the top of the current menu.

4.7.1 Selecting the Print Content

The terminal can be connected to a PC via the USB cable and run the OHAUS ScaleMate software on the PC.

In ScaleMate, there is a window to select the print content (**Result, Gross, Net, Tare, Header, Footer, Mode, Unit and Info**). After selecting the desired content, please click the **Write** button to transmit the data to the scale. (For example: If you select the **Net** and **Gross**, then click the **Write** button in the ScaleMate software. The **Result** and **Gross** are enabled, and other options are disabled in the scale.)

Therefore, you can see the net weight and the gross weight from the output of the printer.
NOTE: You can contact an authorized OHAUS dealer and learn more about the software's other functions.

4.8 Lock Button Configuration

This menu **L.O.C.k** is used to lock access to the certain buttons. When you select ON for one selection, the associated button press will be ignored.
If you select **Lock All Keys**, you will lose function of all buttons.
If the **Menu** button has been locked, long press the **Menu** button until you see **UN.Lk**. Press the **Yes** button to confirm.

Item	Available Settings (Bold is the default settings)
Lock All Keys [**ALL**]	**OFF,** On
Lock Off Key [**OFF**]	**OFF,** On
Lock Zero Key [**ZErO**]	**OFF,** On
Lock Print Key [**PrINt**]	**OFF,** On
Lock Unit Key [**UNIt**]	**OFF,** On
Lock Mode Key [**mMOdE**]	**OFF,** On
Lock Menu Key [**mMeNU**]	**OFF,** On
Lock Tare key [**tarE**]	**OFF,** On
Reset [**rESEt**]	/
End [**END**]	/

5. COMMUNICATION

The Courier 5000 scale can be set up to be compatible with UPS WorldShip shipping software.

5.1 Scale to Device Port Connections

The Courier 5000 scale has a USB type C port.

5.1.1 USB (Type C) Port

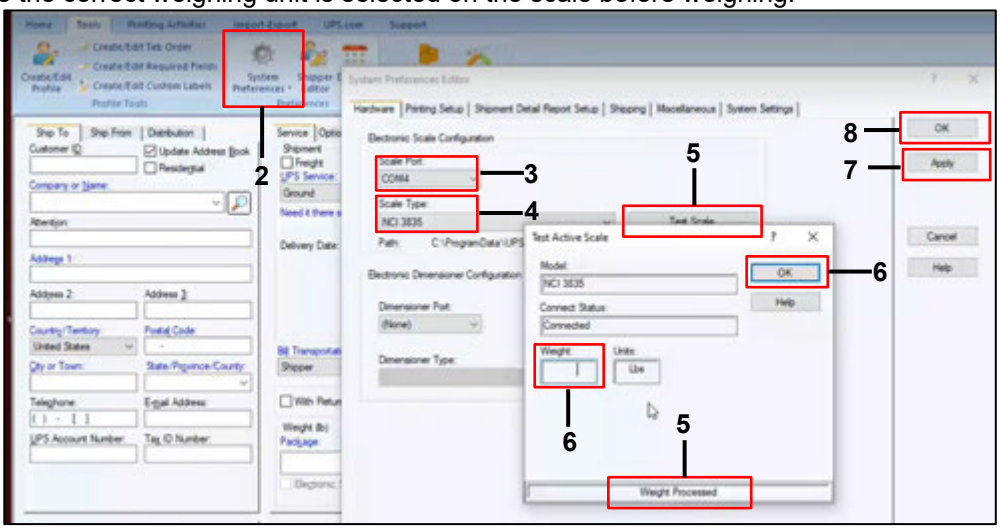
You must select the protocol to be compatible with UPS WorldShip shipping software. UPS WorldShip provides access only to COM ports 1-4 and assign the USB COM port through the Windows Device Manager.

1. Long press the **Menu** button until **mM.E.N.U** appears on the display.
2. Release the **Menu** button, and **C.A.L** appears on the display if CAL lock is off.
3. Short press the **No** button several times until **P.r.N.t.** appears on the display.
4. Press the **Yes** button and **rESEt** appears on the display.
5. Short press the **No** button once, and **ASSIG** appears on the display.
6. Short press the **Yes** button to enter the sub menu.
7. Short press the **No** button several times until **UPS** appears on the display.
8. Short press the **Yes** button to confirm.
9. Redo step 1 and 2, then short press the **No** button several times until **U.S.b** appears on the display. you can set the Baud Rate(**baUd**) to 4800(**4800**), Parity(**PArIt**) to 7-Even(**7-Eue**) and Stop Bit(**StOP**) to 1 bit(**1 bit**) in the USB(**U.S.b**) menu.
10. Press **Menu** button to exit.

5.2 UPS WorldShip to the PC Connection

Steps

1. Start the UPS WorldShip software and go to the System Preferences screen.
2. Click the **System Preferences** and select the **Hardware,** a window called **System Preferences Editor** appears on the screen.
3. Select the corresponding COM port from the Scale port drop-down list.
   NOTE: You can check the exact COM port from the Windows Device Manager without leaving the WorldShip software.
4. Select the NCI 3835 protocol from the Scale Type drop-down list.
5. Click the **Test Scale** button. A window for Test Active Scale will appear.
   NOTE: As the test goes from start to end, you can see the progress bar changes from Weight Processing to Weight Processed.
6. Click **OK** button to close the Test Active Scale window once the weight is successfully processed.
   NOTE: The weight on the scale and the weight in UPS WorldShip should be the same. In some cases, WorldShip may round extra digits from the display weight. If the displayed weight and WorldShip weights are very different, check that the scale and WorldShip are using the same weighing unit (kg, lb or oz).
7. Click **Apply** button to save the selections.
8. Click **OK** button to close the **System Preferences Editor** window, Courier 5000 is ready for UPS weight processing.
   NOTE: UPS WorldShip software only processes the numeric weight value from the scale -- it does not autosense the weighing unit (kg, lb or oz) nor does it make a conversion from one weighing unit to another. Make sure the correct weighing unit is selected on the scale before weighing.



5.3 Interface Protocols

5.3.1 UPS Protocol

3835 Protocol																		
Request displayed weight																		
Command: W <CR>(57h, 0dh)																		
over capacity (invalid data)	<LF>	^	^	^	^	^	^	^	^	<U>	<U>	<CR>	<H1>	<H2>	<ETX>			
under capacity (-20d)	<LF>	–	–	–	–	–	–	–	–	<U>	<U>	<CR>	<H1>	<H2>	<ETX>			
in lb/oz/kg/g (normal data)	<LF>	<p>	<W>	.	<W>	<W>	<W>	<W>	<U>	<U>	<CR>	<H1>	<H2>	<ETX>				
in lb/oz/kg/g	<LF>	<p>	<W>	<W>	.	<W>	<W>	<W>	<U>	<U>	<CR>	<H1>	<H2>	<ETX>				
in lb/oz/kg/g	<LF>	<p>	<W>	<W>	<W>	.	<W>	<W>	<U>	<U>	<CR>	<H1>	<H2>	<ETX>				
in lb/oz/kg/g	<LF>	<p>	<W>	<W>	<W>	<W>	.	<W>	<U>	<U>	<CR>	<H1>	<H2>	<ETX>				
in lb/oz/kg/g	<LF>	<p>	<sp>	<W>	<W>	<W>	<W>	<W>	<U>	<U>	<CR>	<H1>	<H2>	<ETX>				
in lb:oz	<LF>	<p>	<W>	l	b	<sp>	<W>	<W>	.	<W>	<W>	o	z	<CR>	<H1>	<H2>	<ETX>	
in lb:oz	<LF>	<p>	<W>	<W>	l	b	<sp>	<W>	<W>	.	<W>	o	z	<CR>	<H1>	<H2>	<ETX>	
in lb:oz	<LF>	<p>	<sp>	<W>	<W>	<W>	l	b	<sp>	<W>	<W>	o	z	<CR>	<H1>	<H2>	<ETX>	
Initial Zero Error	<LF>	<H1>	<H2>	<CR>	<ETX>													

Request current status					
Command: S <CR> (53h, 0dh)					
Response	<LF>	<H1>	<H2>	<CR>	<ETX>

Request scale to zero	
Command: Z <CR> (5ah, 0dh)	
Response	Scale is zeroed, no response from scale

Unrecognized Command			
Command: others			
Response	<LF>	?	<CR>

Definition of the Symbols and the Bits

Symbols Used	<LF>	line feed (0Ah)
	<CR>	carriage return (0Dh)
	<ETX>	end of text (03h)
	<sp>	space (20h)
	<p>	polarity “-” or “ ” (2Dh or 20h)
	<U><U>	measure units “lb”, “oz”, “kg”, “g”
	<W><W><W><W><W><W>	weight data 6 Bytes
	<H1><H2>	current status

	Bit	Byte 1 (H1)	Byte 2 (H2)
Bit definition <H1 H2>	0	0=stable 1=not stable	0=not under capacity 1=under capacity
	1	0=not at zero point 1= at zero point	0=not over capacity 1=over capacity
	2	0=RAM ok 1=RAM error	0=Flash ROM ok 1= Flash ROM error
	3	0=eeprom ok 1=eeprom error	0=calibration ok 1= calibration error
	4	always 1	always 1
	5	always 1	always 1
	6	always 0	always 0
	7	parity	parity

6. MAINTENANCE

6.1 Cleaning

For Courier 5000, the housing may be cleaned with a cloth dampened with a mild detergent if necessary.

CAUTION: DISCONNECT THE UNIT FROM THE POWER SUPPLY BEFORE CLEANING.

WARNING: Electric Shock Hazard. Disconnect the equipment from the power supply before cleaning. Make sure that no liquid enters the interior of the instrument.

Attention: Do not use solvents, harsh chemicals, ammonia or abrasive cleaning agents.

6.2 Troubleshooting

Table 6-1 Troubleshooting

SYMPTOM	PROBABLE CAUSE (s)	REMEDY
EEP Error	EEPROM Checksum Error	Corrupted EEPROM data
Unable to turn on the scale.	1. USB cable not plugged in or properly connected with PC. 2. Power cord not plugged in or properly connected. 3. Power outlet not supplying power. 4. Batteries out of power. 5. Other failure.	1. Check USB cable connections. Make sure USB cable is plugged in properly. 2. Check power cord connections. Make sure power cord is plugged in properly into the power outlet. 3. Check power source. 4. Change batteries. 5. Service required.
Cannot zero the scale, or will not zero when turned on.	1. Weights on the platform exceeds allowable limits. 2. Weight is not stable. 3. Load cell is damaged.	1. Remove weight on the platform. 2. Wait for weight to become stable, check area around the scale and weight on scale for excessive vibration or movement or increase filtering. 3. Service required.
Cannot display weight in desired weighing unit.	Unit is disabled.	Enable unit in the Units Menu.
Cannot change menu settings.	The **Menu** button has been locked.	Enable the **Menu** button in the **L.O.C.k** Menu.
Error 8.1	Weight reading exceeds Power On Zero limit.	1. Remove weight from the platform. 2. Recalibrate the scale.
Error 8.2	Weight reading below Power On Zero limit.	1. Add weight to the platform. 2. Recalibrate the scale (The Span Calibration and Linearity Calibration require calibration masses)
Error 8.3	Weight reading exceeds Overload limit.	Reduce load on the scale.
Error 8.4	Weight reading below Underload limit.	1. Add weight to the platform. 2. Recalibrate the scale.
Error 8.5	The tare value exceeds the maximum limit value	Reset the tare range
Error 9.5	Calibration data is missing.	Calibrate the scale.
Battery symbol flashing	Low battery	Replace batteries.
CAL E	Calibration failure	Use correct calibration weight.
Lo.bat	Low battery	Replace batteries.

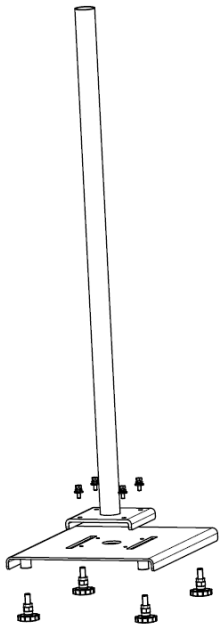
6.3 Service Information

If the troubleshooting section does not resolve your problem, you can contact an authorized OHAUS Service Agent.

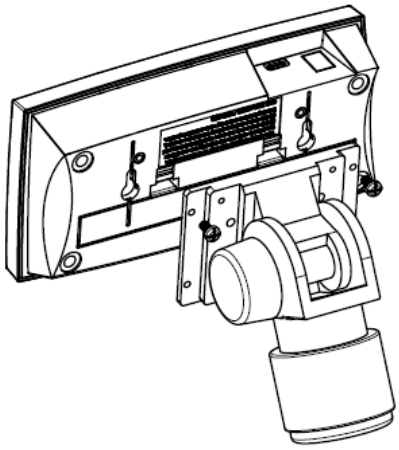
7. ACCESSORY

Remote Column Kit

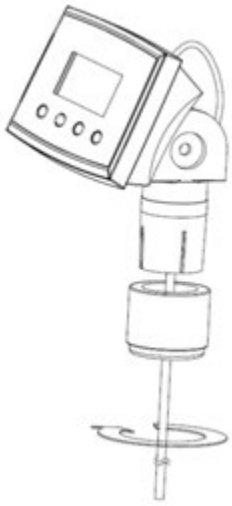
1



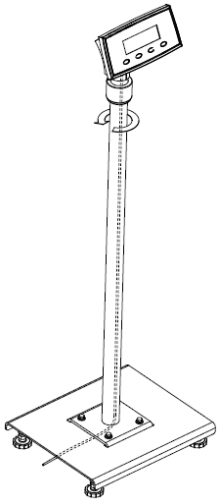
2



3



4



5

8. TECHNICAL DATA

8.1 Specifications

Equipment Ratings:

Indoor use only

Altitude: 2,000m/6,562ft

Operating temperature: -10˚C to 40˚C (14˚F to 104˚F)

Humidity: Maximum relative humidity 80% for temperatures up to 31˚C (87.8˚F) decreasing linearly to 50% relative humidity at 40˚C (104˚F).

Electrical supply: 5VDC, 1A. (For use with certified or approved power supply, which must have a SELV and limited energy output.)
or 3 x AA (LR6) Batteries.

Voltage fluctuations: Mains supply voltage fluctuations up to ±10% of the nominal voltage.

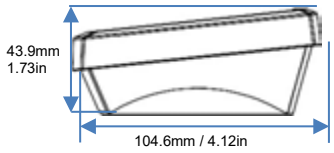
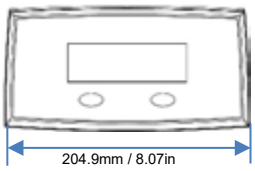
Overvoltage category (Installation category): II

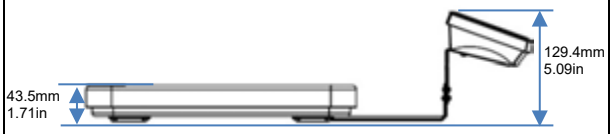
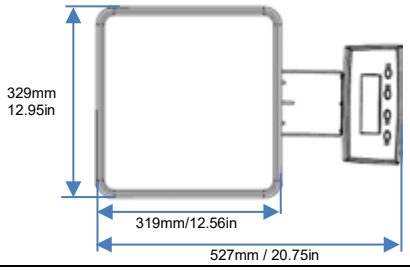
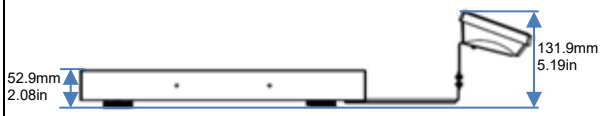
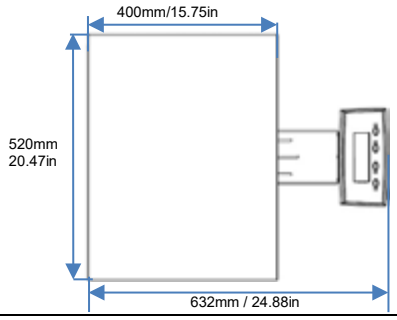
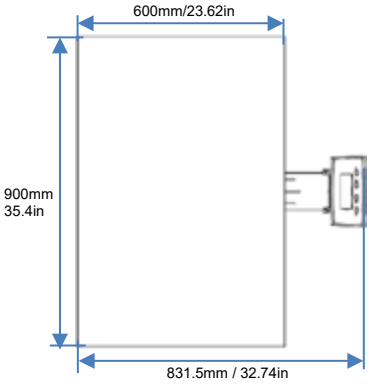
Pollution degree: 2

Table 8-1 Models Specification

Model	i-C52M6R	i-C52M30R	i-C52M50R	i-C52M50L	i-C52M100L	i-C52M200L	i-C52M200X
Capacity × Readability	6 kg x 0.002 kg 6,000 g x 2 g 12 lb x 0.005 lb 192 oz x 0.1 oz 12 lb x 0.1 oz	30 kg x 0.01 kg 30,000 g x 10 g 60 lb x 0.02 lb 960 oz x 0.5 oz 60 lb x 0.5 oz	50 kg x 0.02 kg 50,000 g x 20 g 100 lb x 0.05 lb 1600 oz x 1 oz 100 lb x 1 oz	50 kg x 0.02 kg 50,000 g x 20 g 100 lb x 0.05 lb 1,600 oz x 1 oz 100 lb x 1 oz	100 kg x 0.05 kg 200 lb x 0.1 lb 3,200 oz x 2 oz 200 lb x 2 oz	200 kg x 0.1 kg 400 lb x 0.2 lb 6,400 oz x 5 oz 400 lb x 5 oz	200 kg x 0.1 kg 400 lb x 0.2 lb 6,400 oz x 5 oz 400 lb x 5 oz
Maximum Displayed Resolution	1:3,000	1:3,000	1:2,500	1:2,500	1:2,000	1:2,000	1:2,000
Weighing Units	kg, g, lb, oz, lb:oz (kg, lb, oz, lb:oz for models above 100 kg)						
Application Mode	Weighing, Weight Alert, Dynamic Weighing / Display Hold, Totalization						
Operating Temperature Range	-10˚C to 40˚C / 14˚F to 104˚F						
Keyboard	4 mechanical keys						
Display	28 mm / 1.1 in digit height LCD display with white backlight						
Stabilization Time	1 second						
Auto-zeroing Tracking	off,0.5d,1d or 3d						
Zeroing Range	2% or 100% of capacity						
Power	Dry cell battery: 3 x AA (LR6) batteries (not included) or AC Power adapter: 100-240VAC - 0.5A 50/60Hz; power output: 5.0 VDC 1.0 A or USB cable (USB connection to PC)						
Battery Life	100 hours continuous use with backlight off						
Construction	ABS plastic indicator housing; painted steel base with stainless steel platform, rubber feet (adjustable on L and X models)						
Cable Length	2m / 6.6ft						
Safe Overload Capacity	150% of capacity						
Platform Dimensions (L x W x H)	329 x 319 x 43.5mm / 13.0 x 12.6 x 1.7 in			520 x 400 x 52.9mm / 20.5 x 15.7 x 2.1 in			900 x 600 x50.9 mm / 35.4 x 23.6 x 2.0 in
Net Weight	4.1 kg / 9.0 lb			8.5 kg / 18.7 lb			17.4 kg / 38.4 lb
Shipping Weight	4.8 kg / 10.6 lb			9.5 kg / 21 lb			19.2 kg / 42.3 lb
Shipping Dimensions	395 x 385 x 155 mm / 15.6 x 15.2 x 6.1 in			600 x 485 x 100 mm / 23.6 x 19.1 x 3.9 in			985 x 680 x 105 mm / 38.8 x 26.8 x 4.1 in

8.2 Drawings and Dimensions

Terminal Dimensions—All Models	
	

Name	Scale Dimension (mm / inch)	
i-C52MxR		
i-C52MxL		
i-C52MxX		

8.3 Table of GEO Code Values

Table 8-2 GEO Codes

		Elevation in meters										
		0	325	650	975	1300	1625	1950	2275	2600	2925	3250
		325	650	975	1300	1625	1950	2275	2600	2925	3250	3575
		Elevation in feet										
		0	1060	2130	3200	4260	5330	6400	7460	8530	9600	10660
		1060	2130	3200	4260	5330	6400	7460	8530	9600	10660	11730
Latitude		GEO value										
0°00'	5°46'	5	4	4	3	3	2	2	1	1	0	0
5°46'	9°52'	5	5	4	4	3	3	2	2	1	1	0
9°52'	12°44'	6	5	5	4	4	3	3	2	2	1	1
12°44'	15°06'	6	6	5	5	4	4	3	3	2	2	1
15°06'	17°10'	7	6	6	5	5	4	4	3	3	2	2
17°10'	19°02'	7	7	6	6	5	5	4	4	3	3	2
19°02'	20°45'	8	7	7	6	6	5	5	4	4	3	3
20°45'	22°22'	8	8	7	7	6	6	5	5	4	4	3
22°22'	23°54'	9	8	8	7	7	6	6	5	5	4	4
23°54'	25°21'	9	9	8	8	7	7	6	6	5	5	4
25°21'	26°45'	10	9	9	8	8	7	7	6	6	5	5
26°45'	28°06'	10	10	9	9	8	8	7	7	6	6	5
28°06'	29°25'	11	10	10	9	9	8	8	7	7	6	6
29°25'	30°41'	11	11	10	10	9	9	8	8	7	7	6
30°41'	31°56'	12	11	11	10	10	9	9	8	8	7	7
31°56'	33°09'	12	12	11	11	10	10	9	9	8	8	7
33°09'	34°21'	13	12	12	11	11	10	10	9	9	8	8
34°21'	35°31'	13	13	12	12	11	11	10	10	9	9	8
35°31'	36°41'	14	13	13	12	12	11	11	10	10	9	9
36°41'	37°50'	14	14	13	13	12	12	11	11	10	10	9
37°50'	38°58'	15	14	14	13	13	12	12	11	11	10	10
38°58'	40°05'	15	15	14	14	13	13	12	12	11	11	10
40°05'	41°12'	16	15	15	14	14	13	13	12	12	11	11
41°12'	42°19'	16	16	15	15	14	14	13	13	12	12	11
42°19'	43°26'	17	16	16	15	15	14	14	13	13	12	12
43°26'	44°32'	17	17	16	16	15	15	14	14	13	13	12
44°32'	45°38'	18	17	17	16	16	15	15	14	14	13	13
45°38'	46°45'	18	18	17	17	16	16	15	15	14	14	13
46°45'	47°51'	19	18	18	17	17	16	16	15	15	14	14
47°51'	48°58'	19	19	18	18	17	17	16	16	15	15	14
48°58'	50°06'	20	19	19	18	18	17	17	16	16	15	15
50°06'	51°13'	20	20	19	19	18	18	17	17	16	16	15
51°13'	52°22'	21	20	20	19	19	18	18	17	17	16	16
52°22'	53°31'	21	21	20	20	19	19	18	18	17	17	16
53°31'	54°41'	22	21	21	20	20	19	19	18	18	17	17
54°41'	55°52'	22	22	21	21	20	20	19	19	18	18	17
55°52'	57°04'	23	22	22	21	21	20	20	19	19	18	18
57°04'	58°17'	23	23	22	22	21	21	20	20	19	19	18
58°17'	59°32'	24	23	23	22	22	21	21	20	20	19	19
59°32'	60°49'	24	24	23	23	22	22	21	21	20	20	19
60°49'	62°90'	25	24	24	23	23	22	22	21	21	20	20
62°90'	63°30'	25	25	24	24	23	23	22	22	21	21	20
63°30'	64°55'	26	25	25	24	24	23	23	22	22	21	21
64°55'	66°24'	26	26	25	25	24	24	23	23	22	22	21
66°24'	67°57'	27	26	26	25	25	24	24	23	23	22	22
67°57'	69°35'	27	27	26	26	25	25	24	24	23	23	22
69°35'	71°21'	28	27	27	26	26	25	25	24	24	23	23
71°21'	73°16'	28	28	27	27	26	26	25	25	24	24	23
73°16'	75°24'	29	28	28	27	27	26	26	25	25	24	24
75°24'	77°52'	29	29	28	28	27	27	26	26	25	25	24
77°52'	80°56'	30	29	29	28	28	27	27	26	26	25	25
80°56'	85°45'	30	30	29	29	28	28	27	27	26	26	25
85°45'	90°00'	31	30	30	29	29	28	28	27	27	26	26

9. COMPLIANCE

Compliance to the following standards is indicated by the corresponding mark on the product.

Mark	Standard
CE	This product complies with the applicable harmonized standards of EU Directives 2011/65/EU (RoHS), 2014/30/EU (EMC) and 2014/35/EU (LVD).
UK CA	This product complies with the applicable statutory standards of the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012, UK Electromagnetic Compatibility Regulations 2016 and Electrical Equipment (Safety) Regulations 2016.
	This product complies with the EU Directive 2012/19/EU (WEEE) and 2006/66/EC (Batteries). Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment.
	EN 61326-1

ISED Canada Compliance Statement:
CAN ICES-003(A) / NMB-003(A)

ISO 9001 Registration
The management system governing the production of this product is ISO 9001 certified.

FCC Supplier Declaration of Conformity

Unintentional Radiator per 47CFR Part B
Trade Name: OHAUS CORPORATION
Model or Family identification: i-C52Mxxxx

FCC Compliance Statement:
Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

10. APPENDICES

10.1 MT Standard Continuous Output

A checksum character can be enabled or disabled with continuous output. The data consists of 17 or 18 bytes as shown in the standard continuous output.

Non-significant weight data and tare data digits are transmitted as spaces. The continuous output mode provides compatibility with OHAUS products that require real-time weight data. the standard continuous output.

Table 10-1 shows the format for the standard continuous output.

Table 10-1: Standard Continuous Output Format

		Status[2]			Indicated Weight[3]					Tare Weight[4]							
Character	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
Data	**STX[1]**	**SB-A**	**SB-B**	**SB-C**	**MSD**	**-**	**-**	**-**	**-**	**LSD**	**MSD**	**-**	**-**	**-**	**-**	**LSD**	**CR[5]**	**CHK[6]**

Continuous Output Format Notes:

1. ASCII Start of Text character (02 hex), always transmitted.
2. Status bytes A, B and C. Refer to Table 10-2, Table 10-3, and Table 10-4 for details of the structure.
3. Displayed weight. Either gross or net weight. Six digits, no decimal point or sign. Insignificant leading zeroes are replaced with spaces.
4. Tare weight. Six digits of tare weight data. No decimal point in field.
5. ASCII Carriage Return <CR> character (0D hex).
6. Checksum, transmitted only if enabled in setup. Checksum is used to detect errors in the transmission of data. Checksum is defined as the 2's complement of the seven low order bits of the binary sum of all characters preceding the checksum character, including the <STX> and <CR> characters.

Table 10-2, Table 10-3, and Table 10-4 detail the status bytes for standard continuous output.

Table 10-2: Status Byte A Bit Definitions

Bits 2, 1, and 0			
2	**1**	**0**	**Decimal Point Location**
0	0	0	XXXXX00
0	0	1	XXXXX0
0	1	0	XXXXXX
0	1	1	XXXXX.X
1	0	0	XXXX.XX
1	0	1	XXX.XXX
1	1	0	XX.XXXX
1	1	1	X.XXXXX
Bits 4 and 3			
4	**3**		**Build Code**
0	1		X1
1	0		X2
1	1		X5
Bit 5			Always = 1
Bit 6			Always = 0

Table 10-3: Status Byte B Bit Definitions

Status Bits	Function
Bit 0	Gross = 0, Net = 1
Bit 1	Sign, Positive = 0, Negative = 1
Bit 2	Out of Range = 1 (Over Capacity or Under Zero)
Bit 3	Motion = 1, Stable = 0
Bit 4	lb = 0, kg = 1 (see also Status Byte C, bits 0, 1, 2)
Bit 5	Always = 1
Bit 6	Zero Not Captured after power-up = 1

Table 10-4: Status Byte C Bit Definitions

Bits 2, 1, and 0			**Weight Description**
2	**1**	**0**	
0	0	0	lb or kg, selected by Status Byte B, bit 4
0	0	1	grams (g)
0	1	1	ounces (oz)
1	0	0	not used
1	0	1	not used
1	1	1	tons (ton)
1	1	1	no units
Bit 3			Print Request = 1
Bit 4			Expand Data x 10 = 1, Normal = 0
Bit 5			Always = 1
Bit 6			Always = 0

10.2 OHAUS Commands

Commands listed in the following table will be acknowledged by the scale.
The scale will return “ES” for invalid commands.
Please add **\r\n** after each command to send（**\r** refers to **\return**; **\n** refers to \newline)

OHAUS Commands

Command	Function
P	Print displayed weight (stable or unstable).
IP	Print displayed weight immediately (stable or unstable).
CP	Print weight continuously.
SP	Print weight when stable.
Z	Same as pressing Zero Key.
T	Same as pressing Tare Key.
TA	Set/inquiry of tare weight value. • Set: TA *tare value unit* Example: TA 5 kg • Inquiry: TA
U	Set/inquiry current display unit. • Set: U *unit ID* Example: U 1 Please check the following table 10-5 for the ID of each unit. • Inquiry: U
M	Set/inquiry current application mode. • Set: M application *ID* Example: M 0 Please check the following table 10-6 for the ID of each application. • Inquiry: M
H x "text"	Enter print output string, x = string number (1-5), "text" = string text up to 40 alphanumeric characters.
F x "text"	Enter Footer String content, x = string number (1-2), "text" = string text up to 40 alphanumeric characters.

NOTE:
- The italic content in each command needs to be filled with actual value.
- Space in each command is needed. Please pay attention to it when input commands.

Table 10-5 Unit ID

Unit ID	Unit Name	Abbreviation
0	Gram	g
1	Kilogram	kg
7	Pound	lb
8	Ounce	oz
20	Pound:Ounces	lb:oz

Table 10-6 Application ID

Application ID	Unit Name
0	Weighing
4	Dynamic/Display Hold
6	Totalization
18	Weight Alert

10.3 OH-Continuous Print

- Format 1: For the printout result including interval and continuous printing mode of Weight Alert application

Field	Weight (Right aligned)	Space	Unit (Right aligned)	Space	Stability (?)
Length	11	1	5	1	1
Field	Space	T/N/G/PT (Right aligned)	Space	Application Status (Right aligned)	Term.
Length	1	2	1	6	2

NOTE：Application Status is fixed to 6 or 11 characters. The printed status will be "Under", "Accept", "Over LMTx" for Weight Alert. In Alert mode, the over status will be printed as 6 + 1 space + 4 characters. Such as “Over LMT1”. If the status is undefined, 6 spaces will be printed.

- Format 2: For Non-Weight Alert applications' printout result

Field	Weight (Right aligned)	Space	Unit (Right aligned)	Space	Stability (?)	Space	T/N/G/PT (Right aligned)	Term
Length	11	1	5	1	1	1	2	2

NOTE: Even for Weight Alert application, only result printout (include interval/ continuous print) follows format 1, all other printouts (tare, net, etc.) follows format 2.

LIMITED WARRANTY

OHAUS products are warranted against defects in materials and workmanship from the date of delivery through the duration of the warranty period. During the warranty period OHAUS will repair, or, at its option, replace any component(s) that proves to be defective at no charge, provided that the product is returned, freight prepaid, to OHAUS. This warranty does not apply if the product has been damaged by accident or misuse, exposed to radioactive or corrosive materials, has foreign material penetrating to the inside of the product, or as a result of service or modification by other than OHAUS. In lieu of a properly returned warranty registration card, the warranty period shall begin on the date of shipment to the authorized dealer. No other express or implied warranty is given by OHAUS Corporation. OHAUS Corporation shall not be liable for any consequential damages.

As warranty legislation differs from state to state and country to country, please contact OHAUS or your local OHAUS dealer for further details