

1. Environmental Conditions

- a. Place the balance on a stable platform, away from vibration, air currents, direct sunlight and strong electromagnetic waves.
- b. Ensure the balance is level by using the adjustable feet to place the bubble in the middle of the bubble level.
- c. Operating temperature: 41 °F to 95 °F / 5 °C to 35 °C
Temperature fluctuation ≤ 5 °C / hour
Humidity 50% to 85% RH

2. Operation

- a. Please use the AC/DC adapter provided. Failure to do so will void the warranty. Plug in the AC/DC adapter and wait 5 minutes before turning on the balance.
- b. Turn on the balance using the ON/OFF key on the keyboard. Following the 8.8.8.8. display, the balance will display maximum capacity, "S- -CAL", then 0.000 g in weighing mode. Please allow at least 15 minutes for the balance to warm up before using. (Longer if the temperature is below 60 °F).

3. Calibration

Single range calibration (recommended).

- a. If using a 200 g calibration weight, press "CAL" for 3-4 seconds. The display will show "CAL-dA", then display a weight value. Move the display to d6 by pressing "CAL" repeatedly. The display will then flash 200 g. Add the weight and the balance will calibrate.
- b. To calibrate at full capacity, press "CAL" for 3-4 seconds. The display will show "CAL", then display the weight to be applied (in grams). Apply the weight. The display will show CAL, followed by the weight value. The balance may now be used. If the weight reading is not correct (due to environmental conditions), repeat the process.

4. Weighing

- a. When the black dot at the bottom left of the display has disappeared, the balance is stable and ready to begin weighing. Please press the "TARE" key before weighing.
- b. The maximum weight for model PM-300N is 300 g. If the display shows "-----", the balance has been overloaded. Remove the weight and begin again with a smaller load.

5. Tare

- a. When the balance is stable, press the "TARE" key to always start weighing at zero.

6. Backlight

- a. Press the "BL" backlight button to turn the backlight on and off.

7. Zero-Tracking and Auto-Tare

- a. Turn the balance off. Press and hold the "CAL" key and at the same time, turn the balance on. The display will show "-Zero-". Press the "TARE" key. The display will show "Zero*d". Press the "TARE" key to change the value from 0 to 5, "Zero0d" meaning no zero-tracking and the sensitivity is the highest. "Zero5d" is the factory setting.
- b. Press the "CAL" key. The display will show "-tArE-". Press the "TARE" key to adjust the "*" from 0 to 9. "tArE0d" means there is no auto-tare. "tArE9d" is the factory setting.
- c. "Press the "BL" backlight key to confirm settings. The display will then show "0.000". Your settings will remain the same when the balance is turned on again.

8. Other Functions

- a. **Units.** Press "MODE" for 3 seconds. "Unit" will flash. Then press the "TARE" key and the current unit will flash. Press the "MODE" key to toggle between units. Press the "TARE" key to confirm. The balance will return to weighing in the unit chosen.
- b. **Counting.** Press the "MODE" key for 3 seconds until the display flashes. Press the "MODE" key again to choose "Count". Then press the "TARE" key to confirm. The display will show "pcs". Press the "MODE" key again to choose from "10pcs" to "500pcs". The larger the number, the higher the count accuracy. Put the sample parts on the balance pan and press the "TARE" key to confirm the sample size. The display will show "----". If the sample size is too small the display will show "no-Cou".
- c. **Percentage.** Press the "MODE" key for 3 seconds until the display flashes. Press the "MODE" key again to choose "PER". Then press the "TARE" key to confirm. The display will show "100%". Place the sample to be weighed on the pan and press the "TARE" key to confirm the sample as 100%. Remove the sample and place the goods on the

- pan. The display will show “###%”. If the amount on the pan is too small a weight the display will show “no-PER”.
- d. **Print.** Press the “MODE” key until “Prt” is displayed. Press the “TARE” key to confirm. Press the “MODE” key to change between “hAnd”, “Auto” and “Contin”. Press the “TARE” key to accept.
- “hAnd” – Print on demand
 - “AUto” – Print when the balance is stable
 - “Contin” – Print continuously

*RS 232 port parameter

Pin connections

Ground Pin 5

RXD Pin 3

TXD Pin 2

ASCII code transmission data format: Every 10BIT as a Data frame.

1 start bit, 8 data bits, 1 stop bit, no parity

Baud rate: 9600 bps

- e. **Filtering (Speed of Weighing).** Press the “TARE” key for 3 seconds. The display will show either “SPEED1” or “SPEED2, and then return to weighing mode. The speed will remain at the last speed displayed. To change the speed, repeat the above process. The slower speed, “SPEED1” is more accurate. “SPEED2” is faster.

Safety Note! Electric shock. Please do not use this unit in conditions that may cause the unit to short. This unit is powered by 120 VAC. Use extreme care. There are no user serviceable parts inside the balance.

The wall socket must be equipped with a non-fused grounded conductor contact for electrical safety.

Protect the unit against moisture.

Please disconnect the unit from the main power supply before cleaning. Do not use any liquids or aerosol sprays to clean this unit. Use only a clean dampened cloth.



*A Higher Level of Precision...
A Higher Level of Performance*

Intell-Lab™ Toploading Balance PM-N Series



User Manual

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