

Operator Card



Warning Do not open the indicator enclosure!
Refer all repairs and modifications to your distributor or service technician.

This *Operator Card* describes the IQ plus 590-DC LCD display, weighing and counting operations, and procedures for battery replacement and AC adapter use.

LCD Display and Annunciators

The IQ plus 590-DC display uses a set of LCD annunciators to provide additional information about the value being displayed. The illustration below shows these annunciators and their meanings.

G The displayed weight is a gross weight.

N The displayed weight is a net weight.



Scale is at standstill or within the specified motion band. Some operations, including zero, tare, and printing functions, can only be done when the standstill symbol is shown.



Center of zero. Gross weight is within 0.25 graduations of zero. This annunciator lights when the scale is zeroed.



Indicates that a tare has been entered. The tare value can be entered by pressing the TARE key on the keypad or by sending the KTARE EDP command.



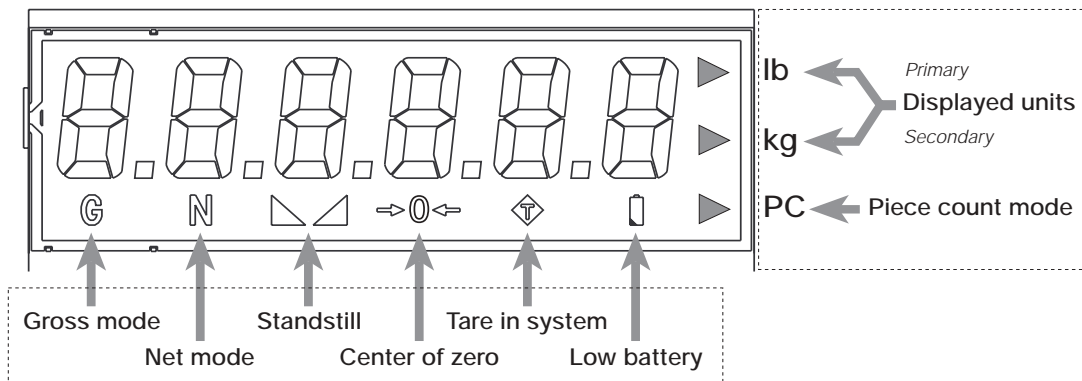
Indicates that the battery charge is low.

lb, kg, PC

Three arrow annunciators on the right side of the LCD display indicate the units associated with the displayed value. The bottom arrow annunciator (PC) is lit when the indicator is in piece count mode. The top and middle arrows, labeled lb and kg, show primary and secondary units, as described below:

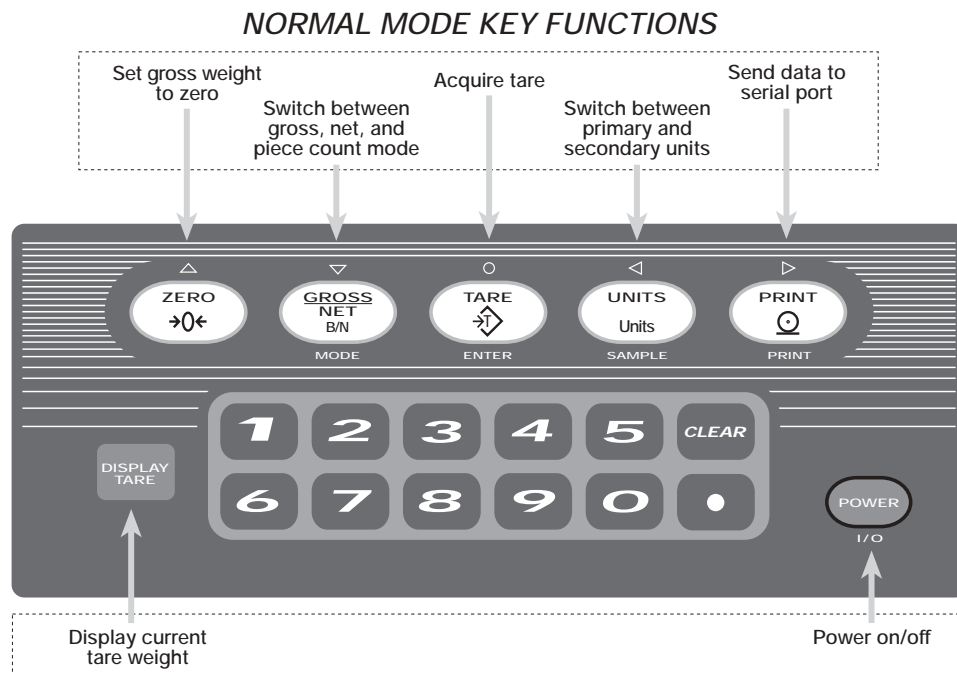
- If the displayed weight is in pounds, the top arrow (lb) is lit; if kilograms, the middle arrow (kg) is lit.
- If the primary unit of weight is pounds, the middle (kg) arrow is lit for secondary units—or, if the primary unit is kilograms, the top (lb) arrow is lit for secondary units, unless the secondary unit of weight is the same as the primary unit.
- If neither primary nor secondary units are pounds or kilograms, the top arrow is used as a primary units annunciator and the middle arrow is used as the secondary units annunciator.

A set of replacement overlay decals is included in the parts kit for units other than pounds and kilograms.



Weighing Operations

The illustration below shows the IQ plus 590-DC keypad and normal mode key functions.



Basic IQ plus 590-DC weighing operations are summarized below:

Toggle Gross/Net/Piece Count Mode

Press the GROSS/NET key to switch the display mode between gross, net, and piece count modes. If a tare value has been entered or acquired, the net value is the gross weight minus the tare. If access to piece count mode is disabled, pressing the GROSS/NET key switches between gross and net modes only.

Gross mode is shown by the G annunciator; net mode is shown by the N annunciator. Piece count mode is shown by the LCD annunciator adjacent to the PC at the right edge of the display.

Toggle Units

Press the UNITS key to switch between primary and secondary units. The units annunciator arrow on the right side of the LCD display points to the units identifier.

Zero Scale

1. In gross mode, remove all weight from the scale and wait for the standstill annunciator (▲▲).
2. Press the ZERO key. The center of zero (→0←) annunciator lights to indicate the scale is zeroed.

Acquire Tare

1. Place container on scale and wait for the standstill annunciator (▲▲).

2. Press the TARE key to acquire the tare weight of the container.
3. Net weight is displayed and the T annunciator lights to show the tare value was acquired.

Enter Tare (Keyed Tare)

1. Use the numeric keypad to enter the tare value, then press the TARE key.
2. Net weight is displayed and the T annunciator lit to show the tare value was entered.

Remove Stored Tare Value

1. Remove all weight from the scale and wait for the standstill annunciator (▲▲).
2. Press the TARE key. The T annunciator goes off, indicating the tare value has been removed.

Indicators with the REGULA parameter set to NONE or NTEP can clear a stored tare value using the following procedure:

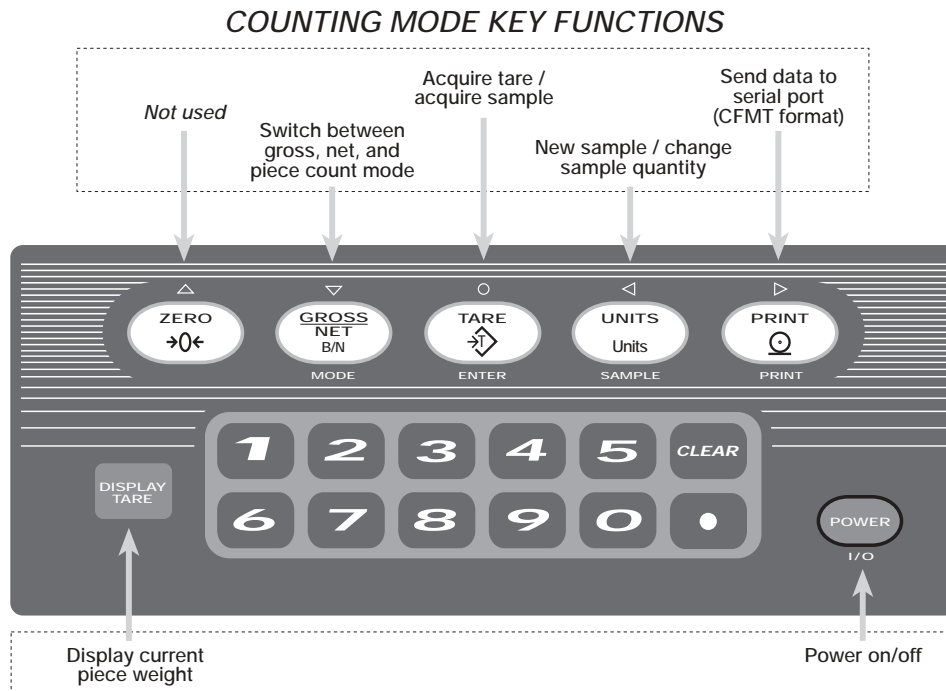
1. Press DISPLAY TARE to show the stored tare value.
2. Press the CLEAR key twice to remove the stored tare.

Print Ticket

1. Wait for the standstill annunciator (▲▲).
2. Press the PRINT key to send weight data to the serial port.

Counting Operations

The illustration below shows the IQ plus 590-DC keypad and piece count mode key functions.




NOTE: Legal-for-trade applications require product to be sold by weight rather than an equivalent parts count. Operator access to piece count mode is disabled when the indicator is shipped from the factory. To use piece count mode, access must be enabled when the indicator is configured.

Piece count mode is entered by pressing the MODE (GROSS/NET) key from normal weighing mode. In count display mode, the display shows the number of parts rather than weight, the arrow annunciator at the right side of the LCD display points to piece count (PC), and pressing the PRINT key sends the CFMT print format data string to the serial port.

IQ plus 590-DC counting operations are summarized below:

Acquire Parts Sample

1. Place empty parts container on scale. Wait for the standstill annunciator (), then press TARE to acquire the tare weight of the container.
2. Press MODE to enter piece count mode.
3. Press the SAMPLE (UNITS) key to enter sample acquisition mode.
4. The indicator display shows the message *Addnnn*, where *nnn* is the sample quantity to be placed on the scale. You can do one of the following:
 - Add the number of parts shown.
 - Choose a different sample size. Press the SAMPLE key to scroll through the selectable sample quantities (5, 10, 20,


50, 100) or use the numeric keypad to specify a custom sample size.

- Specify a known piece weight. Press the SAMPLE key to scroll through the selectable sample quantities until the *PC WGT* prompt is shown. Use the numeric keypad to enter the piece weight.
5. Once the sample quantity is on the scale, press ENTER to calibrate the indicator for counting the new parts. If a sample size was specified, the indicator display shows the message *-CNT-* as it acquires the sample weight, then switches to count display mode and shows the part quantity. If a known piece weight was specified, the display switches to count display mode immediately.

Display Part Weight

To view gross and net weight of parts, press MODE to switch from count display mode to normal weighing mode. To view the current piece weight while in count mode, press the DISPLAY TARE key.

Print Ticket

1. Wait for the standstill annunciator ().
2. Press the PRINT key to send piece count data to the serial port.

Battery Installation

To install or replace batteries, do the following:

1. Remove the four thumbscrews that hold the battery cover to the enclosure backplate.
2. Install six alkaline C-cell batteries as shown in Figure 1.
3. Replace the battery cover and reinstall thumbscrews. Torque thumbscrews to 15 in-lb (1.7 N-m).

NOTE: A grounding screw is provided on the indicator backplate for connecting a grounding wire (see Figure 3 on page 4).

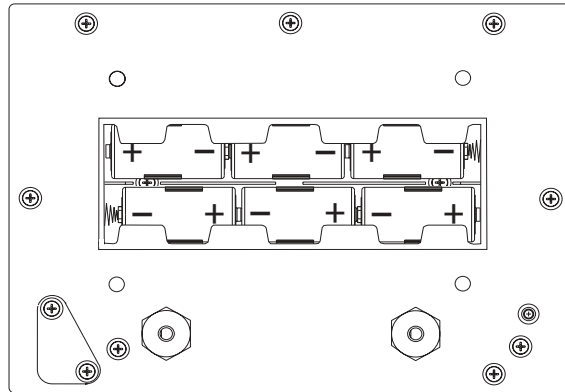


Figure 1. Battery Installation

Using the AC Adapter

The AC adapter can be used to provide power to the indicator if battery power is low and AC power is available. Use only the adapter supplied with the indicator.

To use the AC adapter, do the following:

1. Remove the top screw from the AC adapter port cover.
2. Loosen the bottom screw, then rotate the port cover to expose the AC adapter port (see Figure 2).
3. Reinstall the top screw in the backplate.
4. Plug AC adapter from power outlet to the indicator adapter port.



Caution The IQ plus 590-DC enclosure cannot be rated for NEMA 4X/IP66 applications with the AC adapter port cover open.

Do not use the AC adapter in washdown environments.

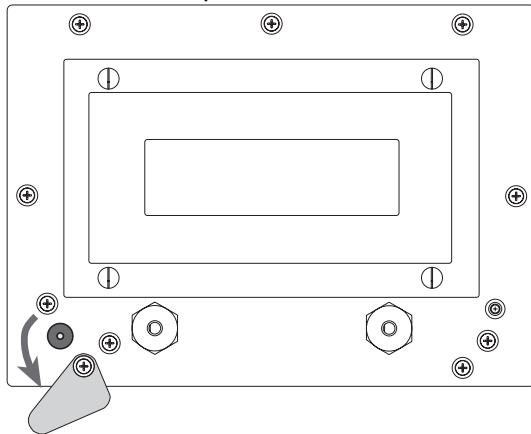


Figure 2. AC Adapter Port Cover

When not using the AC adapter, close the adapter port cover and reinstall all backplate screws. Use the torque pattern shown in Figure 3 to prevent distorting the backplate gasket. Torque screws to 15 in-lb (1.7 N-m).

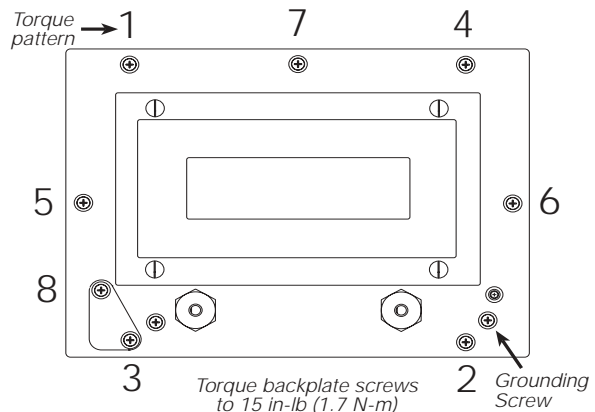


Figure 3. Enclosure Backplate