# 210NP Digital Egg Weigh System

# **INTRODUCTION**

The 210NP Digital Egg Weighing unit includes the following features:

- 1. Six programmable grade weight ranges: 1, 2, 3, 4, 5 and Reject
- 2. Each egg grade range can be assigned to one or many kickers simultaneously.
- 3. Data storage for up to 10 Flocks:
  - a. Egg counts per grade
  - b. Accumulated egg weights per grade
  - c. Average egg weights per grade.
- 4. Flock Accumulator Report output to USB or Thermal Tape Printer.

# SETUP AND CALIBRATION

Remove "Access Screw" in the rear of the indicator unit as shown here:



Use a NON-METALLIC item to press the calibration switch located inside where the access screw was just removed. To enter the setup mode press the calibration switch just one time and the display unit will read "SEtUp". Then press the "Enter" button and it will take you into each setting as indicated below. Note that you will press the "Enter" button each time you enter a setting in order to store and move onto the next setting.

#### SEtUP:

| 1 (YES)         |
|-----------------|
| 0 (NO)          |
| 2 = g (grams)   |
| 2               |
| 1               |
| 200.0           |
| 4 = oz (ounces) |
| 1.0             |
| 0 (NO)          |
| 0 (NO)          |
| 12              |
| 0 (NO)          |
|                 |

| A oFF: | 0 (NO) |
|--------|--------|
| CLtAr: | 0 (NO) |
| SCALE: | 0 (NO) |

After pressing "ENTER" for the "SCALE" setting, the display will read "A-d?". Press "1 (Yes)" to enter into "A-d" menu. Follow the settings under "A-d" as indicated below:

## A-d:

SerScl:0 (NO) dFLt: 3 F: 0 b: 3 10 h: P: 2 Sr: 60 UnS: 3 SC: 3

After pressing "enter" for the "SC" setting, the display will read "CAL?". Press "1 (Yes)" to enter into the "CAL" menu. Follow the settings under "CAL" as indicated below:

# CAL:

CAL 1: 0 (after presssing "Enter" the unit will display a series of dashes until the unit reads "Cal 2")

CAL 2: Place the 200 gram test weight on the scale and input 200.0 (again after hitting "Enter" the unit will display a series of dashes while calibrating)

Once the scale is done calibrating, the display unit will read "SSt?". Press "0 (No)" to bypass this menu and then the display unit will read "tab?". Press "1 (Yes) to enter into the "tab" menu. Follow the settings under "tab" as indicated below:

## tab:

| Loc 1:  | 4 (3 for short grader) |
|---------|------------------------|
| Length: | 2 (1 for short grader) |

## **Kicker Test:**

After pressing "enter" for "Length" setting, the display unit will read "test?". The "test" menu item is not a scale setting, but rather a diagnostic to test if each kicker is working. If you want to complete the Kicker Test press "1 (Yes)". The display will now read "tst in G" and at this point you can press 1, 2, 3, 4, or 5 to test each individual kicker. Each kicker will kick 4 times for every kicker you select to test. To exit the Kicker Test Menu press "Enter" and this will take you back to "test?" where you can press "0 (No)" to exit. The display will then read "Sio?" Then press the "\*" several times until the unit reads "busy". Then after a few seconds the scale has returned back to weighing mode at which

time the unit will read 200.0 when the 200 gram test weight is on the scale or it will read 0.0 if there is no load on the scale.

#### Access Screw:

Once completed with the Setup and Calibration procedure as described above be sure to install the access screw back on to the rear of the scale unit. Failure to do so will allow water and other foreign items to get into the circuit board causing the scale unit to fail.

Once the access screw is back in place, the scale unit is ready for operation. At this point you may also want to check your grade weights and kicker locations to be sure they are at your desired settings. See "Setting Grade Weights and Kicker Locations" below.

# SETTING GRADE WEIGHTS AND KICKER LOCATIONS

The grade weights and kicker locations are preset as follows:

| Grade Weights:               | <b>Kicker Locations:</b> |
|------------------------------|--------------------------|
| Grd $1 = 70.8$ grams (Jumbo) | LoC $1 = 1$              |
| Grd $2 = 63.8$ grams (XL)    | LoC $2 = 2$              |
| Grd $3 = 56.6$ grams (L)     | LoC $3 = 3$              |
| Grd $4 = 49.6$ grams (M)     | LoC 4 = 4                |
| Grd $5 = 42.6$ grams (S)     | LoC $5 = 5$              |
| rEJCt = 84.0 grams (Reject)  |                          |

These settings will sort all eggs  $\ge$  84.0 grams and < 42.6 grams to the reject grade.

In order to set your own Grade Weights and Kicker Locations follow these steps:

- 1. Press the "PRESET" key. The prompt "Grd 1 =" will appear.
- 2. Press "ENTER" to see the current weight. If the current weight is acceptable, simply press "ENTER" again to keep it. To change the weight, key in a numeric value and press "ENTER". For example, press "7" "0" "8" "ENTER" for 70.8 grams.
- 3. The next grade will automatically appear. Repeat step 2 for grades 2 through 5 and the reject grade. NOTE The reject grade <u>MUST</u> be the highest weight setting otherwise <u>ALL</u> of your eggs will be sorted out as rejects.
- 4. After all grades are set the "LoC 1 =" prompt will appear.
- 5. Press "ENTER" to view the currently selected grade for location 1. This will be a value from 1 to 5. If the selected grade is acceptable simply press "ENTER". Otherwise, enter a new grade as a numeric value between 1 and 5 followed by the "ENTER" key.
- 6. Repeat step 5 for locations 2 through 5.
- 7. Once all of the grade weights and kicker locations are set, "MSG ?" will be displayed. You will now press enter a total of 10 times to get back out to the weighing mode. The following list of prompts and settings are displayed after pressing "ENTER" each time:

 o
 MSG ?:
 0

 o
 StArt:
 10

 o
 End:
 85

 o
 AUto Z:
 3

 o
 USb P:
 0

After pressing "ENTER" for the last "0" shown above the scale will return to normal weighing mode.

## Setting the Same Grade Weights Across Multiple Kicker Locations:

A grade may be selected for multiple kicker locations. The eggs will alternate between kickers that have the same settings. Below is an example of how you could set the scale to sort just three different grade weights.

| Grade Weights:              | <b>Kicker Locations:</b> |
|-----------------------------|--------------------------|
| Grd $1 = 63.8$ grams (XL)   | LoC $1 = 1$              |
| Grd $2 = 63.8$ grams (XL)   | LoC $2 = 1$              |
| Grd $3 = 56.6$ grams (L)    | LoC 3 = 3                |
| Grd $4 = 56.6$ grams (L)    | LoC 4 = 3                |
| Grd $5 = 49.6$ grams (M)    | LoC 5 = 5                |
| rEJCt = 84.0 grams (Reject) |                          |

Note that if you have a Vac Pak, you are limited on how you can set your grade weights and kicker locations. The vibrating grids in each grade weight location are set specifically for J, XL, L, M, and S respectively in that order. You may be able to set your XL location up to J, but not down to a M when using a Vac Pak.

## **UNITS**

Grams and ounces are the only units enabled for this application. They can be toggled by pressing the **UNITS** key.

## FLOCK AND DATA COLLECTION

#### **Selecting a Flock**

- 1. You can store egg grading data for up to 10 flocks
- 2. Press \* (Asterisk Key) followed by the PRESET KEY. The prompt "FLoCK=" will appear.
- 3. Press **ENTER** to see the currently selected flock. If the selected flock is acceptable, simply press **ENTER** again to keep it. To change the flock, key in a number from 1 to 10 and press **ENTER**.

## View and Edit Counts, Accumulated Weights and Average Weights per Grade

- 1. You can view the following data for each flock you currently have selected:
  - a. Egg Counts per Grade (Cnt 1=, Cnt 2=, etc.)
  - b. Accumulated Egg Weights per Grade (ACm 1=, ACm 2=, etc.)
  - c. Average Egg Weights per Grade (AvG 1=, AvG 2=, etc.)
- 2. Press \* (Asterisk) followed by the Fn Key to enter the accumulators menu. The prompt "Cnt 1=" will appear.
- 3. Press **ENTER** to view the count for grade 1. To keep the value, press **ENTER** or key in a new value at this time.
- 4. The next count will appear. Repeat step 2 for grade counts 2 through 5 and the reject count.
- 5. The "ACm 1=" prompt will appear. Press **ENTER** to see the current value. The value will be in the currently selected units.
- 6. To keep the value, press **ENTER** again or key in a new value followed by the **ENTER** key.
- 7. The "AvG 1=" prompt will appear. Press **ENTER** to see the current value. The value will be in the currently selected units.
- 8. To keep the value, press **ENTER** again or key in a new value followed by the **ENTER** key.
- 9. Repeat steps 5 through 8 for accumulators 2 through 5 and the reject accumulator.

## **Zeroing Flocks**

- 1. Press the \* (Asterisk) key followed by the ZERO key. The prompt "FLoCK=" will appear.
- 2. To zero all flocks press **ENTER** or key in "0" followed by the **ENTER** key. The prompt "CL AC?" will appear. Press the **YES** key (1) followed by the ENTER key to clear all accumulated weights and counts for all flocks.
- 3. To zero a single flock, key in the flock number from 1 to 10 followed by the **ENTER** key. The prompt "CL AC?" will appear. Press the **YES** key (1) followed by the ENTER key. Counters and accumulators for that flock will be reset to 0.

#### Print Flock Accumulator Report

A flock accumulator report outputs the time and date followed by the counts and weight accumulators for each grade in the current flock. This report will always run for whichever flock is currently selected. The report may be output to a **USB** or **Thermal Tape Printer**.

To output the report, press \* (Asterisk) followed by the **PRINT** key. See next page for example of the report.

| An | Exam | ple | Report |  |
|----|------|-----|--------|--|
|----|------|-----|--------|--|

| 10:25 5/30/2014<br>FLOCK ACCUMULATOR REPORT<br>Flock #1 |          |                  |                  |
|---|----------|------------------|------------------|
|   | COUNT    | TOTAL WT         | AVG WT           |
| Grade 1   | 0        | 0.0              | 0.0 g            |
| Grade 3   | 65<br>01 | 3991.9           | 61.4 g           |
| Grade 4<br>Grade 5                                      | 21<br>82 | 1133.0<br>3706.0 | 51.5 g<br>45.2 g |
| Rejects   | 1        | 42.2             | 42.2 g           |

Contact National Poultry Equipment to equip your scale with a USB or Thermal Tape Printer.