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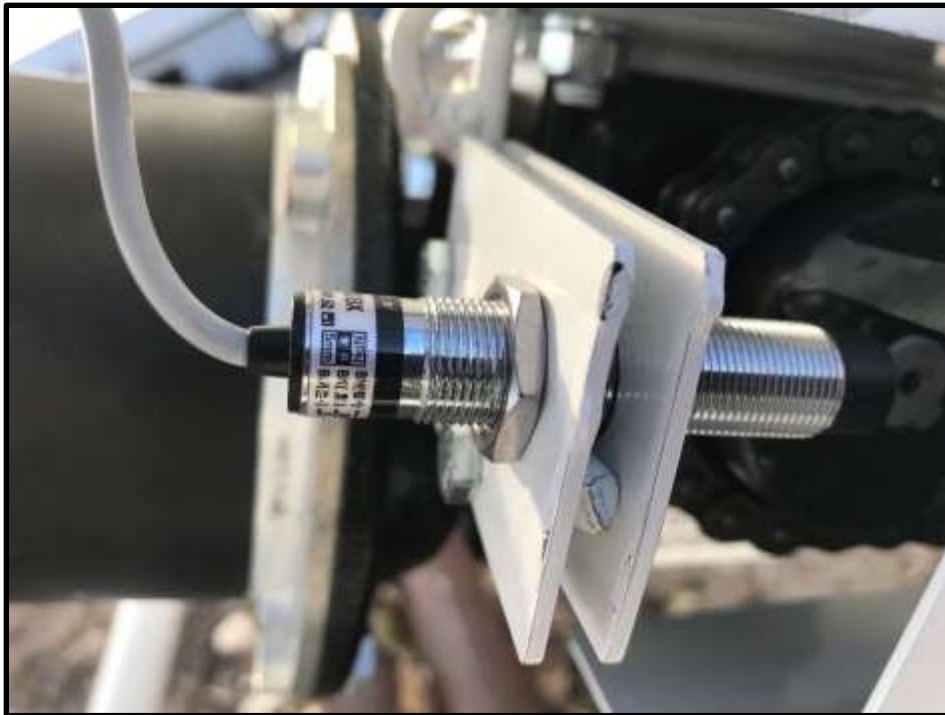
Phone: (402) 966-2251

*weldermanufacturing.com*

Digital Counter Welker Cake Feeder Direct (Regular)

Wiring Upgrade:

From a Calculator Counter to a Digital Counter





Locate, disconnect & remove the Gray Calculator Sensor Wire from both the caker & pickup. **Remove the magnet from the sprocket and the sensor magnet from the post on the gear box. ALL OF THE MAGNETS AND THE GLUE MUST BE REMOVED FROM THE -SPROCKET!**



Mount the sensor with the included brackets around the post that you removed the magnet sensor from.

Place the silver sensor in the mounting bracket; place one nut in the front of the bracket, then one nut behind. When placing your sensor, it will need to be least an 1/8" to 1/4" from the sprocket tab.

Run the new sensor wire in both the caker-side wiring harness & the pickup cab. Place your Red Lion Digital Counter Monitor on the dash in cab of the vehicle. Connect the power cord and sensor wire, test. If your monitor lights

up but won't count; see below. If you are still unable to solve it, call the Office at (402) 966-2251.

## Trouble Shooting for Digital Counter

### The counter monitor will not light up

- The power cord to monitor might have a wire pulled loose. Check the connections on the back of the display to look for a loose / damaged wire. If this end is ok, a wire may be loose / damaged on the other end at the 6-prong plug.
- Your power point may not be getting power. Check the pickup fuses; also test your cigarette lighter with a test light or an OEM meter to make sure there is power.

### My counter display is fine but will not count

- The sensor needs to see the tab on the sprocket. The distance from the end of the sensor to the tab should be no more than the width of two (2) credit cards apart.

## Does the light on the back of the sliver sensor on the caker side light up and blink each time the tab on the sprocket comes around?

- **Constant Light:** Means it is reading the sprocket instead of the tab on the sprocket. Adjust the Sensor Mount Bracket out towards the end of the sprocket so the sensor can see the tab but not the entire sprocket hub.
- **No Light:** No power. Take the silver plugs apart and make sure they are clean and free of dirt, cobwebs, and there are no bare wires touching. Then verify all your wires are connected. Also make sure you have no bare wires touching the metal outside casing.

## **DIGITAL COUNTER SECTION**



Our Red Lion Counter is a small display with a bracket that will be mounted in the cab of your pickup, typically on the dash. The digital read-out display is easy to read with a reset button (the RST button on the right). The display can also be changed from red to green. It includes a power cord that will already be attached to the back of the counter box that will be plugged in to your pickup's cigarette lighter along with the sensor wire. You will take the other end of the sensor wire into the female 6-prong plug that is mounted back on the flatbed/box.

This counter will only count revolutions, so it will need calibrated it to your feed output.

### **CALIBRATING THE COUNTER**

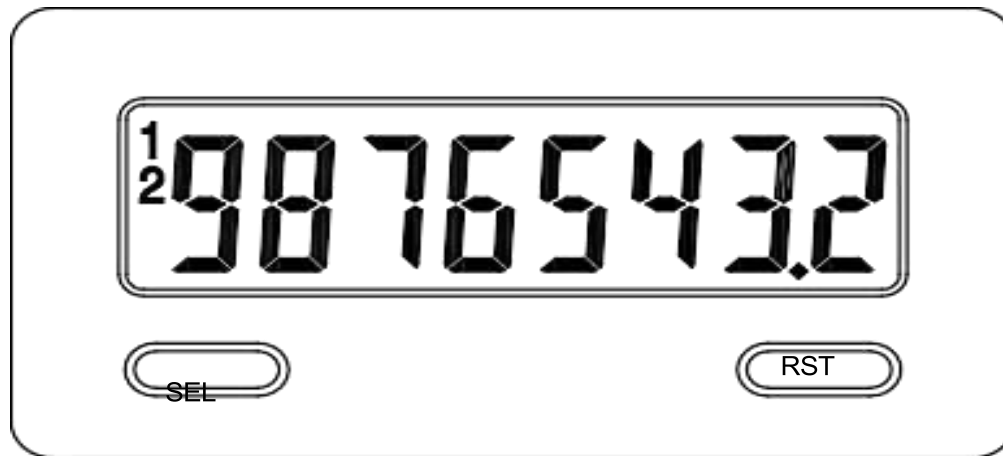
Press the button to run the caker until the feed begins to run down the spout.

1. Press the "reset" button on the counter. (counter should read zero.)
2. Determine the empty weight of a 5-gallon bucket, or a similar container (tare).
3. Place the bucket/container so the cake feeder will dispense feed into it.
4. Press the button which runs the feeder and hold it until your bucket/container is full.
5. Weigh the bucket/container, then subtract the tare to determine the weight of the feed dispensed.
6. Divide the weight (pounds) of the feed dispensed by the number displayed on the counter.

The result will be the pounds of feed dispensed for every revolution of the counting mechanism. For example:

You have 300 head of cows you wish to feed 2.5 pounds per head. (A total of 750 pounds feed) You have a 5-gallon bucket that weighs 3 pounds empty. After filling the bucket, you weigh it and determine the weight of the bucket to be 38 pounds. You subtract the empty weight of the bucket (3 pounds) and determine there are 35 pounds of feed in the bucket. The number displayed on the counter (the number of revolutions it took to fill the bucket) is 7. You divide 35 by 7 and determine the calibration number to be 5. (The feeder is dispensing at 5 pounds of feed per revolution.) Therefore, to feed 750 pounds of feed, you will have to reset your counter to zero and run the caker until the number displayed on the counter is 150.

# Reviewing the Front Buttons & Display



| KEY | DISPLAY MODE OPERATION                 | ENTERING PROGRAM MODE                    | PROGRAMMING MODE OPERATION                                                  |
|-----|----------------------------------------|------------------------------------------|-----------------------------------------------------------------------------|
| SEL | Index display through enabled values   | Press and hold for 2 seconds to activate | Store selected parameter and index to next parameter                        |
| RST | Resets count display(s) and/or outputs |                                          | Advances through the program menu/<br>selected parameter value or selection |

## OPERATING MODE DISPLAY DESIGNATORS

- “K” - To the left of the display is the rate value.
- Counter A has no designator.

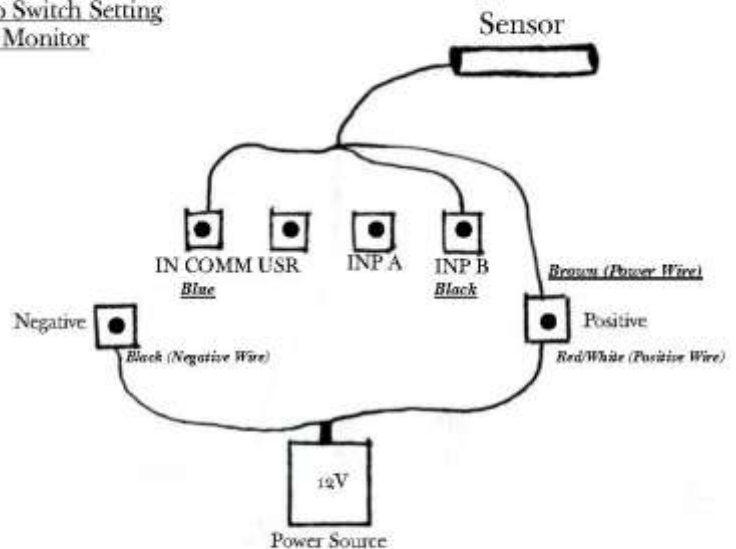
“b” - To the left of the display is the Counter B value (dual count or batch). “1” and “2” - Indicates setpoint 1 and 2 output status

Pressing the SEL button toggles the meter through the selected displays. If display scroll is enabled, the display will toggle automatically every four seconds between the rate and count values.



Dip Switch Setting for Monitor

## Wiring Diagram for Red Lion Counters



# Programming the Display

## PLEASE NOTE:

We do not recommend doing this without reading through the entire guide. If a mistake is made while programming, especially if you are unsure of how to fix it, it is best to reset the counter settings then start fresh.

If you have a question or are unsure of how to change a setting; the email for the office is: [weldermanufacturing@gpccom.net](mailto:weldermanufacturing@gpccom.net). The phone number for the office is: (402) 966-2251. You may also access the full programming guide on our website: [welkermanufacturing.com](http://welkermanufacturing.com)

When your counter & rate indicator is powered up, it enters its display mode and is ready for work. If you need, or want, to make changes you must first enter the programming mode. To enter this mode: press & hold the "SEL" button for two seconds, or until the screen displays "NO". If you enter this mode by accident, and the screen still says "NO", pressing the "SEL" button will return the display to normal operation. If it does not say "NO" but instead a number followed by a word, press the "RST" button until the screen says "NO" again, then press the "SEL" button to return to normal operation.

To change the color of the backlit display:

1. Start by entering the programming mode by holding the "SEL" button for two seconds or until the screen displays "NO"
2. Enter the display menu by pressing the "RST" button three times or until the display reads "3-dsplay"
3. Navigate to the display backlight color setting. Press the "SEL" button four times or until the display reads "d-Color"
4. Select your desired backlight color for your display. Red will be displayed "rEd" while green will be displayed as "Grn"
5. Press "SEL" until you exit the programming mode & return to normal operation.



**See more of our trouble shooting and parts pictures on  
our website:**

**[www.weldermanufacturing.com](http://www.weldermanufacturing.com)**

**Thank you all for your business with our small-town operation!**

**We work HARD for you!**