



CARDINAL®



CIM100

Continuous In Motion

225 Software Addendum

June 14, 2019
Rev. 2.02

INTRODUCTION:

The CIM-100 package weighing operation provides weight classification on the display, digital output port and serial port. As a package is exiting the scale the display will show "UNDER, ACCEPT or OVER" with the package weight, at the same time the digital output will energize output #1 for under, #2 for accept or #3 for over. In addition to the visual displays the 225 will transmit the selected fields out the selected serial port.

SETUP:

MODE OF OP=0

A comma delimited record of the weight data will be sent via the PORT= selection. The fields contained in the comma delimited record are selected using the PRINT TAB settings. Fields will be transmitted according to the tab setting entered. A tab setting of zero (00.00) will exclude the field from the record. Setting TIME=00.01, DATE=00.02 and GROSS=00.03 will create the record "22:54, 05/01/00, 100 LB G,".

The check-weighed weight may also be sent to a remote display. In the "Serial Menu", select the port that the remote display will be connected to; this MUST be a different port than what was selected for the printer above.

Set the Baud, Parity, Bits, and Stop parameters to match the remote display. The CONT parameter MUST be set to YES, the TYPE may be either SMA or SB400 format described below.

If using entrance and exit sensor with a reject arm exit sensor will be used to trigger rejection. Go into Setup Menu 4 and confirm that "EXIT SENSOR AS REJECT SENSOR=YES."

If using entrance, exit, and reject sensor with a reject arm then navigate to Setup Menu 4 and set "EXIT SENSOR AS REJECT SENSOR=NO."

NOTE: If you are using a separate rejection sensor then the distance between the CIM-100 and the reject sensor must be less than the distance between items to be weighed.

OPERATION:

Press the PRESET key to enter the UNDER and OVER values. Packages weighing more than the UNDER value and less than the OVER value are considered ACCEPTable and will not initiate the (optional) output #4 reject arm. Weight values may be stored permanently.

Optional reject operation:

The DELAY=xx.x prompt is displayed. This is the amount of time in tenths of a second that the box is to be in front of the eject sensor, when this time goes to zero the eject arm will be activated.

If the DELAY=00.0, then the reject operation is disabled.

The HOLD=xx.x prompt is displayed. This is the amount of time in tenths of a second that the eject arm will be activated. This timer starts when the eject arm was activated, when the time has expired the eject arm will be de-activated.

Whenever a reject operation is done, a reject counter will be incremented. The counter is a system wide item and is not tied to an ID.

To view the reject counter;

- 1) Hold down the **SHIFT** key and press the ← key
- 2) **FUNCTION=** will be displayed below the weight
- 3) Press the **PRESET** key
- 4) The reject counter will be displayed below the weight
- 5) Press the **ZERO** key to set the counter to zero, or press any other key to leave the counter unchanged.

To Add Or Edit Permanent ID Strings:

1. Press the MEM key. The ID= prompt is displayed.
2. Enter up to a 12-digit alphanumeric ID string and press the ENTER key.
3. The REF=XXXXXXXXXXXXX prompt will be shown, where XXXXXXXXXXXXXXXX is the name associated with the ID
4. If the name displayed is acceptable, press the ENTER key to save it. Otherwise, using the alphanumeric keys enter up to 12 characters for the name and press the ENTER key.
5. The stored UNDER weight prompt is displayed. This weight value is the lowest allowed weight.
6. If the displayed value is correct, press the ENTER key and proceed to step 7. If the value displayed is incorrect, enter the correct weight value and then press the ENTER.
7. The stored OVER weight prompt is displayed. This weight value is the highest allowed weight.
8. If the displayed value is correct, press the ENTER key and proceed to step 9. If the value displayed is incorrect, enter the correct weight value and then press the ENTER.
9. The indicator will return to normal operation.

To Delete A Permanent ID String:

1. Press the MEM key. The ID= prompt is displayed.
2. Enter the ID string to be deleted then press the DELETE key.
3. The display will show DELETING momentarily.
4. The ID string entered along with its associated weights will be deleted and the 225 will return to normal operation.

To Delete All Permanent ID Strings:

1. Press the MEM key. The ID= prompt is displayed.
2. Press the DELETE key. The DEL ALL? NO prompt is displayed, which asks if all ID strings are to be deleted.
3. To delete all ID strings, press the Y/YES key to change the display to DEL ALL? YES, then press the ENTER key.
4. The display will show DELETING momentarily, then the 225 will return to normal operation.
5. If deleting all ID strings is not desired, with the display showing DEL ALL? NO, press the ENTER key to return to normal operation.

To use Permanent ID checkweigh values:

1. Press the ID key. The ID= prompt is displayed.
2. Enter up to a 12-digit alphanumeric ID string and press the ENTER key.
3. The REF=xxxxxxxxxxxx prompt will be displayed for a couple of seconds, (the name associated with the ID).
4. The target weight values for the checkweigher will be set to the stored values.

To view or modify the checkweigh values:

1. Press the PRESET key.
2. The UNDER=xxxxxx prompt is displayed. If the current value is correct press the ENTER key, otherwise, key in the new weight value and press the ENTER key.
3. The OVER=xxxxxx prompt is displayed. If the current value is correct press the ENTER key, otherwise, key in the new weight value and press the ENTER key.

CONNECTIONS

Outputs:

- P19-2 UNDER (OUT1)**
- P19-3 ACCEPT (OUT2)**
- P19-4 OVER (OUT)**
- P19-5 REJECT ARM (OUT4)**

Inputs:

- P17-2 Entrance Sensor (IN1)**
- P17-3 Exit Sensor (IN2)**
- P17-4 Reject Sensor (IN3)**

DATA STREAM FORMATS:

SMA – (Type=0)

```
<lf><s><r><n><m><f><xxxxxx.xxx><uuu><cr>
```

Where:

lf = Line Feed

s = Flags Z= center of Zero, O = Over cap, E = zero Error,

e = weight not currently being displayed

r = Range 1, 2, 3, ...

n = Mode G = Gross, T = Tare, N = Net

m = Motion M = Motion, " " (*blank*) = no motion

f = Custom Custom flag

xxxxxx.xxx = Weight Six digits with decimal point

uuu = Units ton, lb, oz, t, kg, g

cr = Carriage Return (hex 0D)

SB-400 – (Type=1)

```
<s><xxxxxx><d><uu><m><cc><cr>
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Where:

s = Sign "-" = negative, " " (*blank*) = positive

xxxxxx.xxx = Weight Six digits

d = Decimal point Added to string if enabled in setup

uu = Units tn, lb, oz, t, kg, g

m = Mode G = Gross, N = Net

cc = Weight Status OC = over capacity

CZ = center of zero

MO = motion

ee = weight not currently being displayed

cr = Carriage Return (hex 0D)

Cardinal Scale Mfg. Co.

102 E. Daugherty, Webb City, MO 64870 USA

Ph: 417-673-4631 or 1-800-641-2008

Fax: 417-673-2153

www.cardinalscale.com

Technical Support: 1-866-254-8261

E-mail: tech@cardet.com

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