

BINTRAC[®]

Breeder Control Operation Manual

Patented

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Thank you for purchasing a BinTrac Breeder Control from HerdStar, LLC.

Overview

Your BinTrac Breeder Control provides a cost-effective way to automatically monitor bin level and batch a programmed load or unload amount.

Components

A BinTrac Breeder Control consists of a few basic components:

BinTrac Breeder Control

This is the main unit of the BinTrac system. The BinTrac Breeder Control communicates with the Smart Summing Boxes to register the weight of material in the bins. The material level is computed and displayed on the LED bar graph.



Load Cell Bracket

Four or more load cell brackets allow the BinTrac system to accurately measure the material weight in your bins. The Smart Summing Box averages the signals from all brackets to minimize errors that could result from voids (holes) in the material.

Smart Summing Box

A single Smart Summing Box per bin communicates the current reading on the leg brackets to the BinTrac Breeder Control.

BinTrac Power Supply

This provides the power for the BinTrac Breeder Control. The power supply converts the line voltage to low voltage.

BinTrac Breeder Control Remote Display

A BinTrac Breeder Control Remote Display is a standard BinTrac Breeder Control indicator configured as a Remote Display. A hardwire cable must connect the Remote Display to the Master BinTrac Breeder Control. Required for dual Breeder Control configurations.

BinTrac Remote Display (Optional)

A BinTrac Remote Display is a standard BinTrac Indicator configured as a Remote Display. A hardwire cable must connect the Remote Display to the Master BinTrac Breeder Control.

Features

Weight Display

The BinTrac Breeder Control displays the gross weight of the bin and its level.

Batch Run

The BinTrac Breeder Control features a relay to enable a load or unload system for batching a programmed amount.

Fill Events

The BinTrac Breeder Control records the net weight increase of the last four fill events.

24-Hour Usage

The BinTrac Breeder Control records the last four operational 24-hour usage amounts.

Remote Display

A BinTrac Indicator is configured as a Remote Display which will display the same updated weight information from the host Breeder Indicator.

About This Manual

The BinTrac Breeder Control Operation Manual is divided into a few different sections:

- **System Settings** – This section covers how to access and navigate the SETUP menu. It gives a basic overview of what each setting is used for.
- **Setup and Operation** – This section covers the specific setup and operation instructions for each configuration that is possible with the BinTrac Breeder Control. Refer to **Configurations** below to determine which configuration is appropriate for your scenario.
- **Service** – This section covers the basic maintenance of the BinTrac Breeder Control system as well as troubleshooting should problems arise.

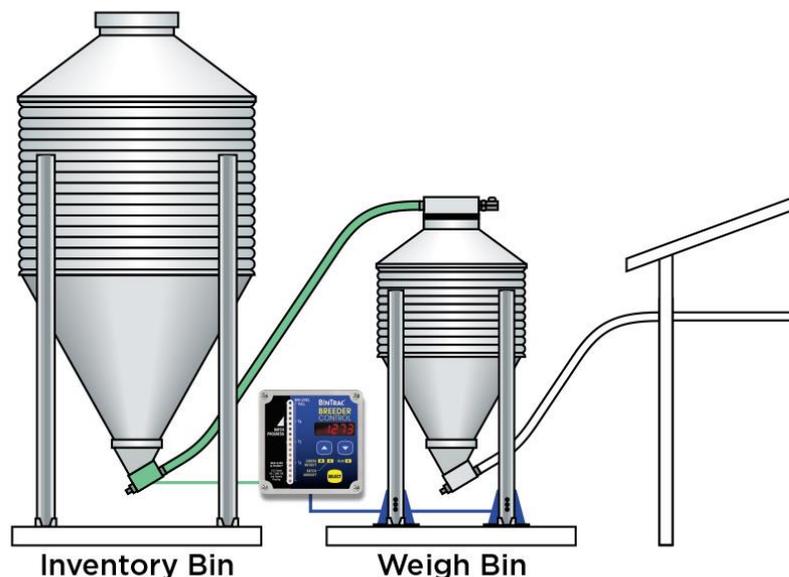
Configurations

The BinTrac Breeder Control can be used in different configurations based on your needs. Before beginning the setup of your system, determine which configuration you will be using. Below is an overview of the four different configurations of batching. After determining the appropriate configuration, proceed to the portion of the manual for that specific configuration by using the noted page numbers.

Gain-In-Weight (Load Batch Method)

[Pages 12 - 18](#)

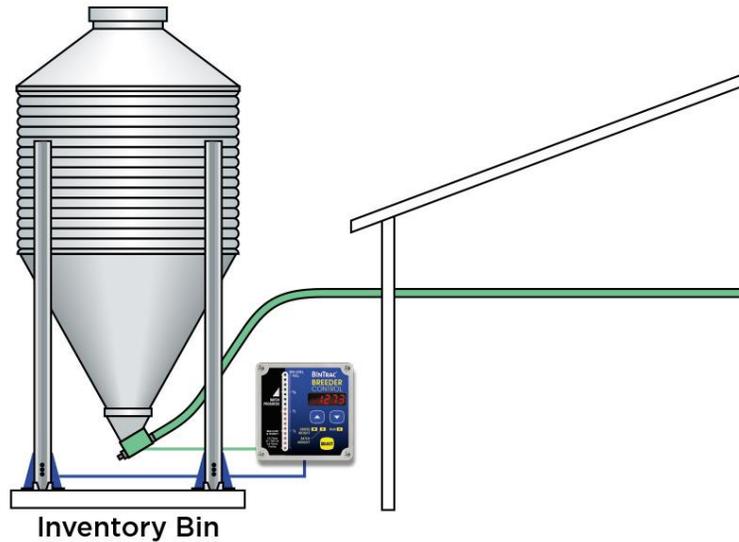
The BinTrac Breeder Control System allows the user to select the amount of feed required for the day. The BinTrac Breeder Control System controls a conveying system to deliver feed from the Inventory Bin to the Weigh Bin. The Weigh Bin weighs the feed delivered and the BinTrac Breeder Control System stops the delivery when the required amount of feed has been delivered to the Weigh Bin. In this configuration, the system batches into the weigh bin until the total weight (gross weight) equals the target batch amount.



Loss-In-Weight (Unload Batch Method)

[Pages 19 - 25](#)

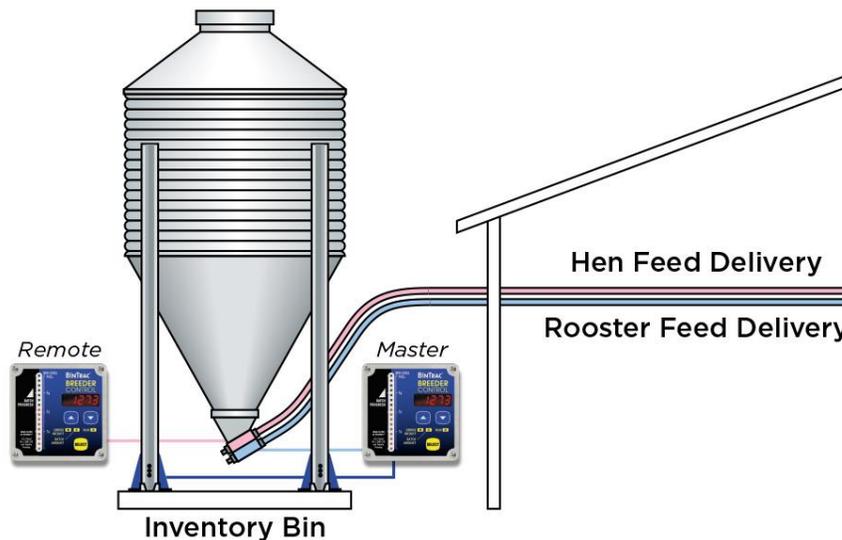
The Loss-In-Weight (Unload Batch Method) allows the user to select the target batch amount of feed required for the day. The BinTrac Breeder Control System will enable the hopper or feed line fill system allowing the feed line system to transfer the feed into the house until the required amount of feed has been delivered. In this configuration, this system batches and unloads until the batch target amount is unloaded from the bin.



Inventory Bins with Dual Breeder Console Unloads

[Pages 26 - 36](#)

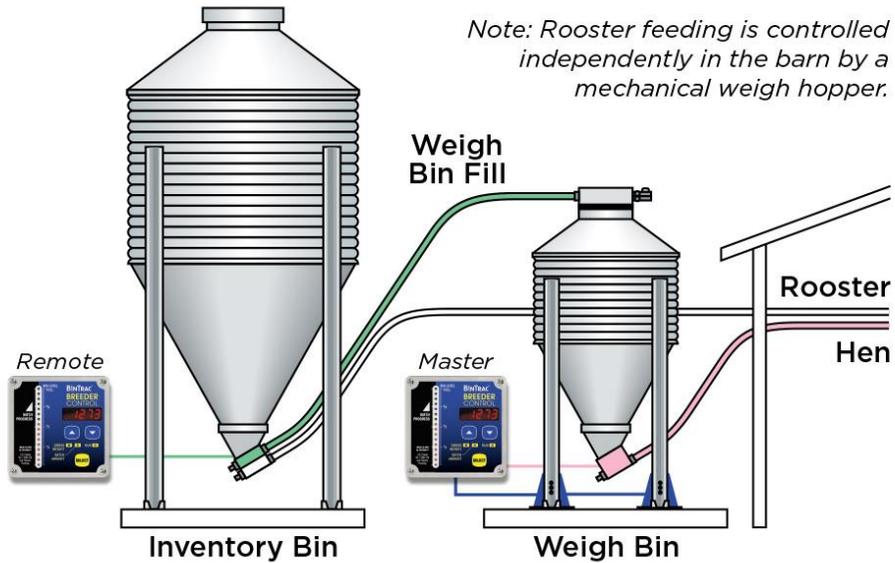
Dual Breeder Consoles can be connected to a single inventory bin for programmed batching of two independent amounts on separate delivery systems. The system can be used for both rooster (Master) and hen (Remote) feeding by enabling/disabling the appropriate feed delivery system. The system features an auto/manual override feature for each auger via an external switch.



Weigh Bin with Dual Breeder Consoles for Programmed Fill and Batch

[Pages 37 - 47](#)

This configuration provides automated filling and batching of hen feed using a weigh bin. A Remote Breeder Console provides automated filling of a programmed gross weight amount into a weigh bin. A Master Breeder Console provides automated loss-in-weight batching of a programmed amount for the hen feeding. There is an auto/manual override feature for each auger via an external switch.



System Settings

The SETUP mode is used to configure the different settings and parameters of the BinTrac Breeder Control.

Note: If there is no activity for a period of time while in SETUP mode, the system will exit SETUP mode and return to Weight Display mode.

Accessing the Setup mode

1. Press and hold the SELECT button down until **SETUP** is displayed.

Segmented display:



Navigating Setup mode

To navigate through the options in SETUP mode, use the and keys to cycle through the options/parameters. Refer to the SETUP menu flow chart to the right.

Selecting an Option in Setup mode

To select an option/parameter to edit in SETUP mode, you must navigate to the option you wish to edit using the and keys. Press the SELECT key when you reach the desired option.

Options in Setup Mode

In the SETUP Mode, the four LEDs indicate configuration options as being enabled (solid on) or disabled (flashing).

- GROSS WEIGHT - Configures a BinTrac or Breeder Indicator as a Remote Display automatically when connected to a Master Breeder Control with Peripheral Devices enabled.
- BATCH AMT - NOT USED
- LED (left of RUN) - NOT USED
- RUN - Enable communications to Peripheral devices. Must be enabled when Breeder Control is connected to a Remote Display device (REMOTE BinTrac or Breeder Control console).



SETUP Menu Flow Chart

Batch

Enables you to set the batch option to **LoAd** or **u.LoAd** (unload). **LoAd** is used when you want material batched into a bin. Based on the gross weight of the bin, material is batched into the bin until the batched amount equals the gross amount. **u.LoAd** is used when you want material batched out of a bin. In this case, the bin is holding a bulk amount of feed and will batch out the programmed batch amount.

1. Press the SELECT key to enter menu.
2. Use the  or  keys to select **LoAd** or **u.LoAd**.

Segmented display:



Rated Value

The average rated output in millivolt/volt (mV/V) of the load cells. If using load cells **other** than the HerdStar load cells, you may need adjust this value appropriately.

***IMPORTANT – DO NOT change this setting from the default of 3.000 if you are using HerdStar load cells.**

1. Press the BIN key to select the desired bin.
2. Use the UPPER  key to increase the rated output by 0.001.
3. Use the LOWER  key to decrease the rated output by 0.001.

Segmented display:



Load Cell Capacity Value

Sets the total capacity of each bin. The total capacity is the sum of all the load cells rated capacity. This can be calculated by multiplying the capacity of individual load cells by the number of legs on the bin. Example: A four-legged bin using 10k load cells would result in an L.C.CAP setting of 40000.

Note: When setting up for kilograms, convert the total capacity to kilograms.

1. Press the BIN key to select the desired bin.
2. Use the UPPER  key to increase the value by 1 lb.
3. Use the LOWER  key to decrease the value by 1 lb.

Segmented Display:



Increment Value

Sets the increment that the bin weight will be rounded to. The reading from a bin is rounded to the nearest multiple of the increment, using standard rounding rules. The possible values are: 1, 2, 5, 10, 20, 50, 100, 200, 500, 1., 2., 5., 10., 20., and 50..

Example: If an increment of 10 is selected and the net value of a bin's weight is 11,314 lbs., the segmented display will read 11310. Refer to **Figure 1** for more examples based on a net weight of 11,314 pounds.

Note: When the increment value is followed by a ".", the displayed weight value is then scaled by 10. For example, an increment value of 1. would cause 120462 pounds to show as 12046. on the display. This is required when the displayed weight will exceed the 5 available digits on the BTB200.

1. Press the BIN key to select the desired bin.
2. Use the UPPER  key to increase the increment value.
3. Use the LOWER  key to decrease the increment value.

Segmented display:



incr	Display
1	11314
2	11314
5	11315
10	11310
20	11320
50	11300
100	11300
200	11400
500	11500
1.	1131.
2.	1132.
5.	1130.
10.	1130.
20.	1140.
50.	1150.

Figure 1

Full Value

Sets the weight of a full bin. This is for calibration of the LED bar graph level. The value dictates at what net weight the bar graph will display completely full (all 16 LEDs lit).

1. Press the BIN key to select the desired bin.
2. Use the UPPER  key to increase the value by 1 lb.
3. Use the LOWER  key to decrease the value by 1 lb.

Segmented display:



Zero Value

Sets the weight of the empty bin. This value can also be set in the Operation Settings. This is used to compensate for the empty weight of the bin to give an accurate value for the net weight of the material inside the bin.

Example: A bin weighs 1,200 lbs. empty. By setting the zero value to 1200, the BinTrac indicator calculates the material weight as the total weight less the zero-weight value.

Note: If the bin was zeroed on the Indicator by pressing and holding the UPPER  and LOWER  keys (see [Page 16](#) – Startup **step 5**), this field will display the automatically calculated amount.

1. Press the BIN key to select the desired bin.
2. Use the UPPER  key to increase the value by 1.
3. Use the LOWER  key to decrease the value by 1.

Segmented display:



Year

Sets the current year.

Segmented display:



Month

Sets the current month.

Segmented display:



Date

Sets the current date.

Segmented display:



Hour

Sets the current hour in 24-hour format.

Segmented display:



Minute

Sets the current minute

Segmented display:



Station ID Value

Sets the Station ID of the device. When interfacing the device to a Communication Hub (CH100), set this value from 1 to 127. **Each BinTrac device must have a unique Station ID.**

1. Press the BIN key to select the desired bin.
2. Use the UPPER key to increase the value by 1.
3. Use the LOWER key to decrease the value by 1.

Segmented display:



Software Version

Displays the Breeder Control programmed software version number.

1. Press the BIN key to see the software version number.

Segmented display:



Smart Summing Box Software Version (Version 3.0 and higher)

Displays the software version number of each of the connected Smart Summing Boxes. This number may be required if technical help is needed.

1. Press the BIN key to see the software version for each enabled bin.

Segmented display:



SSUEr

End

Allows the user to exit SETUP mode.

1. Press the BIN button to exit SETUP mode.

Segmented display:



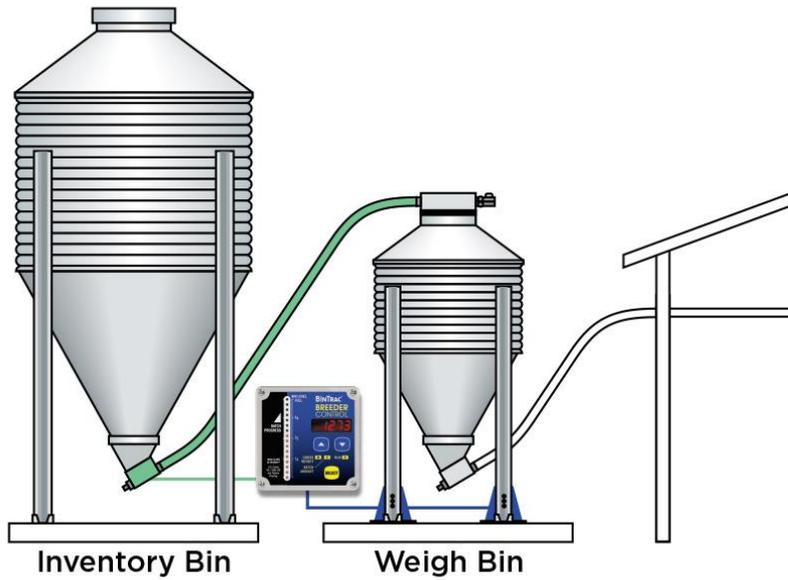
End

Setup and Operation

Gain-In-Weight (Load Batch Method)

Overview

The BinTrac Breeder Control allows the user to select the amount of feed required for the day. The control activates a fill system to deliver feed from the Inventory Bin to the Weigh Bin. The Weigh Bin is equipped with load cells to weigh the incoming feed. Once the total amount of feed (Gross Weight) is loaded into the Weigh Bin, the Breeder Control shuts down the incoming fill line.



Setup Parameters

Follow the system wiring diagram ([Page 18](#)) to aid in the installation process, including supplied relays and switches. Once installation is completed, the BinTrac Breeder Control unit must be programmed as summarized below:

1. The BinTrac Breeder Control console controls the batching from the inventory bin into the weigh bin (**steps 1 through 19**).

Access SETUP mode and configure the following:

- Set the Batch type to Load Batching
- Set an **L.C.CAP** value that matches the total capacity of all load cells
- Set a **FuLL** value that matches the maximum capacity of the weigh bin
- Set the **Hour** time parameter (default is CST Zone)

System Settings in Setup Mode

The SETUP mode is used to configure the one-time system setup settings for the appropriate configuration. The following SETUP parameters **MUST** be correctly configured to ensure proper operation and weighing:

- BATCH
- L.C.CAP
- FULL
- ZERO
- HOUR

NOTE: When first powering on the unit, **SEt.LC** will be displayed. This is simply a reminder that the load cell capacity for the system must be entered in the SETUP menu to ensure proper weighing calibration.

NOTE: If there is no activity for a period of time while in SETUP mode, the system will exit and return to the Weight Display mode.

Navigating Setup Mode

To navigate through the options in SETUP mode, use the and keys to cycle through the options/parameters. See the SETUP menu flow chart to the right.

Accessing the Setup Mode

1. Press and hold the SELECT button down until **SEtUP** is displayed.

Segmented display:

2. Press the key and **bAtch** will be displayed.



SETUP Menu Flow Chart

Batch

Enables you to set the batch option to **LoAd** or **u.LoAd**. In this configuration, the parameter MUST be set for **LoAd** to batch from the inventory bin into the weigh bin.

Segmented display:



3. Press the SELECT key to enter BATCH menu, and **u.LoAd** should be displayed. Press  to set to **LoAd**.
4. Press the SELECT key and then **rAtEd** is shown.
5. Press  and **L.C.CAP** is displayed.

Capacity (L.C.CAP)

The load cell system capacity is the sum of all the load cells rated capacity in either pounds or kilograms. This parameter sets the calibration of the system. To determine this value, multiply the number of load cells by their capacity.

Example: A four leg bin with 5k load cells would require an L.C.CAP setting of 20000 pounds.

Segmented display:



6. Press the SELECT key. The display will show the current setting (default is 30000).
7. Use the  and  keys to increase or decrease the value. Hold the key down to increase/decrease quickly.
8. Upon setting the appropriate value, press SELECT and the display will show **INCR**.
9. Press the  key and **FULL** is displayed.

Full Value

This value is the maximum weight of a full bin in either pounds or kilograms as is for calibration of the LED bar graph level. The value determines at what weight the bar graph will display completely full (all 16 LEDs lit). Set this to the maximum amount of feed that you would consider the bin to be full.

Segmented display:



10. Press the SELECT key.
11. Use the  and  keys to increase or decrease the value. Hold the key down to increase/decrease quickly.
12. Upon setting the appropriate value, press SELECT and the display will show **ZERO**.

Zero Value

Sets the weight of the empty bin in either pounds or kilograms. Convenient when wanting to calibrate a system when a small amount of feed is already in the bin. The zero value is used to compensate for the empty weight of the bin to give an accurate value for the net weight of the material inside the bin. The Breeder Control calculates the material weight as the total weight less the zero (empty) weight value.

Example: A bin weighs 1200 pounds empty. In standard operation mode, simply press and hold on both the  and  keys until  displays. This would then set the zero value in the SETUP mode to 1200.

Segmented display:



13. Press the SELECT key. The current zero value is shown. If zeroed in standard operation mode, simply record this value for future reference. If you need to adjust this value, use the  and  keys until the desired value for an empty bin is shown.
14. Press the SELECT key and  is displayed.
15. Press the  key three times until  is displayed.

Hour

Sets the current hour in 24-hour (military) format. The default hour is set to CST and should be adjusted, if necessary, for your time zone.

Segmented display:



16. Press the SELECT key and the current hour is displayed. Use the  and  keys to enter the proper hour in 24-hour format.
17. Once the proper value is displayed, press SELECT and  is displayed.
18. Press the  key four times until  is displayed.

End

Allows the user to exit SETUP mode.

19. Press the SELECT button while  is displayed to exit SETUP mode.

Segmented display:



Startup

1. Inspect BinTrac installation on weigh bin and verify legs are evenly lifted and not binding.
2. Verify area under bin legs is free and clear of any material.
3. Check weighing accuracy
 - a. Have someone with known weight sit on bin cross-bar support as close to leg as possible to verify bracket assembly is accurately measuring weight.
 - b. Repeat on each cross-bar support.
4. **Important - Manually fill weigh bin with approximately 100 lbs. of feed to allow for overshoot and ensure flowability of feed during unload process.**
5. Zero Inventory Bin.
 - a. Make sure weigh bin is empty and in the Gross weight mode on the Breeder Console. Hold on both the  and  keys until the display shows 0.
 - b. Record Zero _____ (empty weight of bin) by viewing in SETUP Menu (Used for resetting the zero point of the scale if it is ever zeroed out with weight on the bin in the future).

Note: The batch filling of Weigh Bin must be completed one hour prior to starting the batching of the programmed feeding.

Operation

Press the SELECT key to select between Gross Weight and Batch Amount. The Gross Weight is the total material remaining in the bin. The bar graph indicates the approximate level of the bin. The Batch Amount is remaining weight left to batch to reach the Batch Target. Note: Batch Weight always starts at the Batch Target and counts down to "0" weight. This provides the best means to display the amount left to batch.

Manual Batch Run

1. Press the  key until **batch** is displayed.
2. Press SELECT to view the Batch Target Weight value.
3. Use the  key to increase the value by 1.
4. Use the  key to decrease the value by 1.
5. Press SELECT to display the batch run control status (**run** or **STOP**).
6. Use the  or  keys to enable or disable batch run control.
7. Press SELECT to start Batching if run was selected. The batch run will begin immediately.

Scheduled Batch Run

1. Press  key until **batch** is displayed.
2. Use the  key to select **Schdl**.
3. Press SELECT to view the hour and minute schedule.
4. Use the  key to select hour and minute to schedule batch.
Note: This is a 24-hour clock (i.e. 13:00 = 1:00pm).
5. Press SELECT to view the Batch Target Weight value.
6. Use the  key to increase the value by 1.
7. Use the  key to decrease the value by 1.
8. Press SELECT to display the batch run control status (**run** or **STOP**).

9. Use the  or  keys to enable or disable batch run control.
10. Press SELECT with **RUN** displayed. The Indicator will then display the batch amount and a countdown to the next batch run.
11. To stop a scheduled batch run, use the  key and **STOP** will be displayed. Press the SELECT key once to stop and again on the batch amount. The Indicator will then return to display the gross amount in the bin.

Pause Batch Run

1. To pause a batch in mid run, press the  key twice and **PAUSE** is displayed. Press SELECT key to pause the batch run.
2. When paused, the indicator will alternate between **PAUSE** and the remaining batch amount on the screen.
3. To restart the batch, press the  key until **RUN** is displayed, then press the SELECT key. The batch will then continue until completed.

Display Fill Events

This procedure allows you to view the last four recorded fill events.

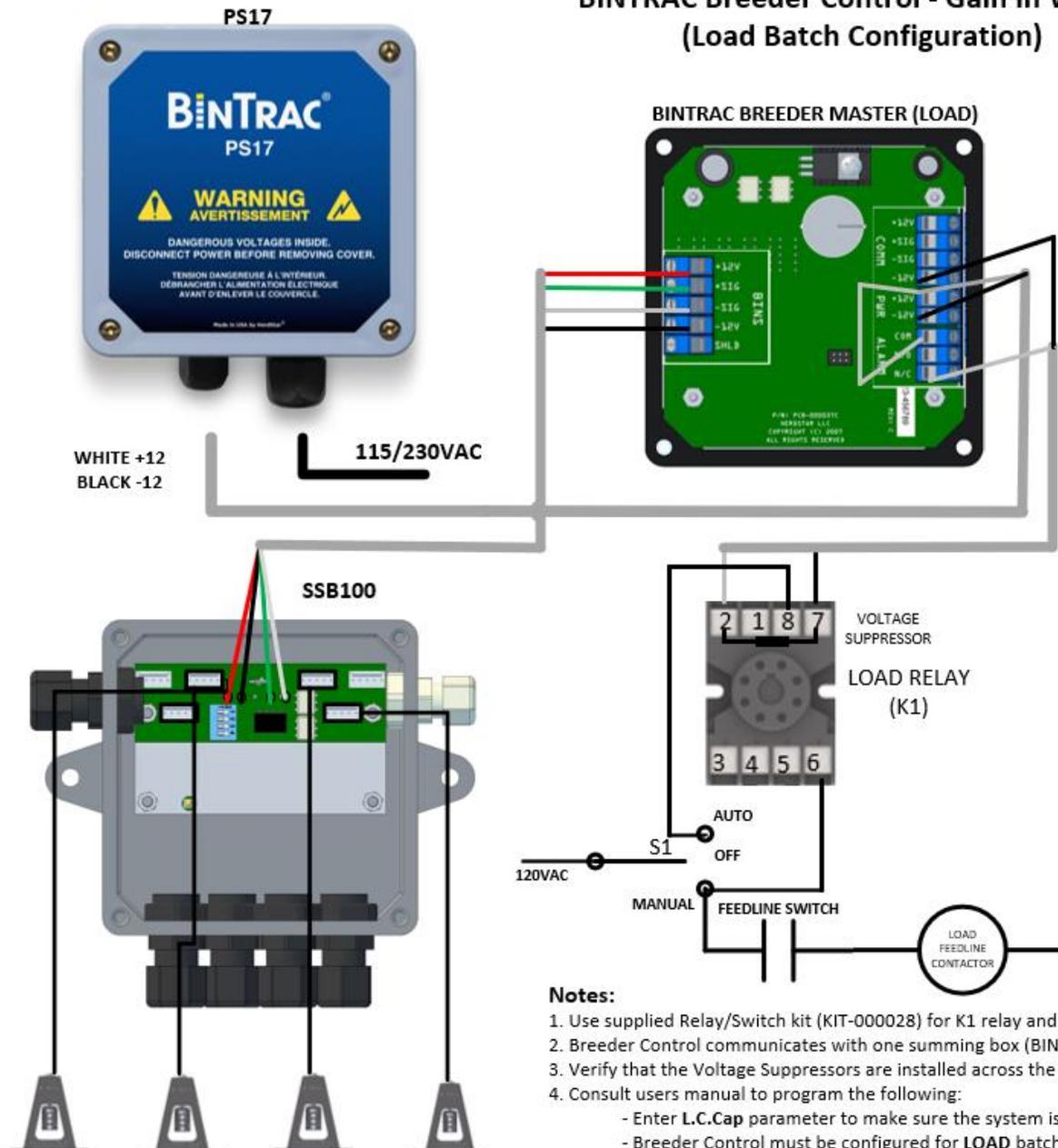
1. Press the  key until **FILL** is displayed.
2. Press SELECT to view the last recorded fill event.
3. Press the  key to view other prior recorded fill events.
4. Press SELECT to return to Weight Display mode or unit will return to Weight Display mode after a period of time with no activity (no keystrokes).

Display 24 Hour Usage

This procedure allows you to view the last four 24-hour usage amounts.

1. Press the  key twice until **USAGE** is displayed.
2. Press SELECT to view the last recorded 24-hour usage amount.
3. Press  key to view other prior recorded usage amounts.
4. Press SELECT to return to Weight Display mode or unit will return to Weight Display mode after a period of time with no activity (no keystrokes).

BINTRAC Breeder Control - Gain In Weight (Load Batch Configuration)



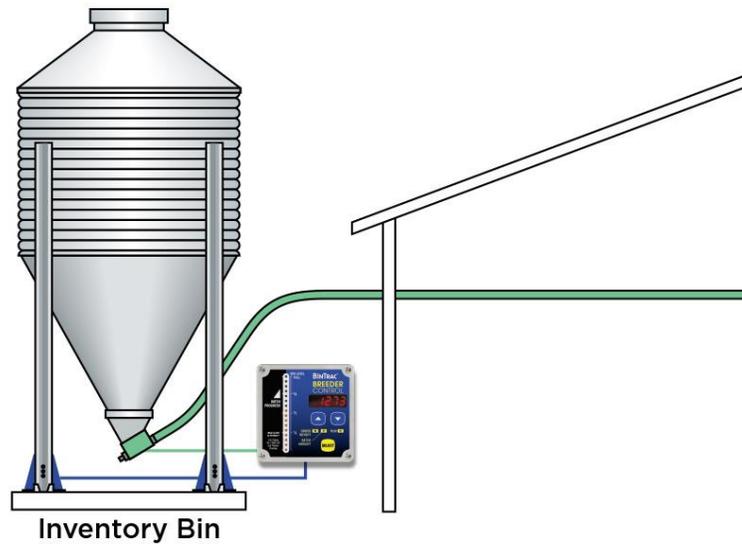
Notes:

1. Use supplied Relay/Switch kit (KIT-000028) for K1 relay and S1 switches.
2. Breeder Control communicates with one summing box (BIN A). Make sure 4 position dipswitches are all OFF in SSB100.
3. Verify that the Voltage Suppressors are installed across the relay coil as included in the Relay Switch Kit.
4. Consult users manual to program the following:
 - Enter L.C.Cap parameter to make sure the system is configured to weigh properly.
 - Breeder Control must be configured for **LOAD** batching.
 - MASTER Unit must have SETUP D enabled for Peripherals.

Loss-In-Weight (Unload Batch Method)

Overview

In a single bin system, the BinTrac Breeder Control allows the user to select the amount of feed required for the day. The Breeder Control enables the hopper/feed line fill system to draw feed directly from the bin until the required amount of feed has been delivered into the house. When the total amount of feed has been delivered, the Breeder Control shuts down the feed delivery system.



Setup Parameters

Follow the system wiring diagram ([Page 25](#)) to aid in the installation process, including supplied relays and switches. Once installation is completed, the BinTrac Breeder Control unit must be programmed as summarized below:

1. The BinTrac Breeder Control console controls the unload batching withdrawal auger (**steps 1 through 19**).

Access SETUP mode and configure the following:

- Set the Batch type to Unload Batching
- Set an **L.C.CAP** value that matches the total capacity of all load cells
- Set a **FuLL** value that matches the maximum capacity of the weigh bin
- Set the **Hour** time parameter (default is CST Zone)

System Settings in Setup Mode

The SETUP mode is used to configure the one-time system setup settings for the appropriate configuration. The following SETUP parameters MUST be correctly configured to ensure proper operation and weighing:

- BATCH
- L.C.CAP
- FULL
- ZERO
- HOUR

NOTE: When first powering on the unit **SEt.LC** will be displayed, simply as a reminder that the load cell capacity for the system must be entered in the SETUP menu to ensure proper weighing calibration.

NOTE: If there is no activity for a period of time while in SETUP mode, the system will exit and return to the Weight Display mode.

Navigating Setup Mode

To navigate through the options in Setup mode, use the and keys to cycle through the options/parameters. See the SETUP menu flow chart to the right.

Accessing the Setup Mode

1. Press and hold the SELECT button down until **SEtUP** is displayed.

Segmented display:



2. Press the and **bAtch** will be displayed.



SETUP Menu Flow Chart

Batch

Enables you to set the batch option to **LoAd** or **u.LoAd**. In this configuration, the parameter MUST be set for **u.LoAd** to batch from the inventory bin into the weigh bin.

Segmented display:



3. Press the SELECT key to enter BATCH menu, and **u.LoAd** should be displayed. If **LoAd** is displayed, press  to set to **u.LoAd**.
4. Press the SELECT key and then **rAtEd** is shown.
5. Press  and **L.C.CAP** is displayed.

Capacity (L.C.CAP)

The load cell system capacity is the sum of all the load cells rated capacity in either pounds or kilograms. This parameter sets the calibration of the system. To determine this value, multiply the number of load cells by their capacity.

Example: A four leg bin with 5k load cells would require an L.C.CAP setting of 20000 pounds.

Segmented display:



6. Press the SELECT key. The display will show the current setting (default is 30000).
7. Use the  and  keys to increase or decrease the value. Hold the key down to increase/decrease quickly.
8. Upon setting the appropriate value, press SELECT and the display will show **1000**.
9. Press the  key and **FULL** is displayed.

Full Value

This value is the maximum weight of a full bin in either pounds or kilograms as is for calibration of the LED bar graph level. The value determines at what weight the bar graph will display completely full (all 16 LEDs lit). Set this to the maximum amount of feed that you would consider the bin to be full.

Segmented display:



10. Press the SELECT key.
11. Use the  and  keys to increase or decrease the value. Hold the key down to increase/decrease quickly.
12. Upon setting the appropriate value, press SELECT and the display will show **2000**.

Zero Value

Sets the weight of the empty bin in either pounds or kilograms. Convenient when wanting to calibrate a system when a small amount of feed is already in the bin. The zero value is used to compensate for the empty weight of the bin to give an accurate value for the net weight of the material inside the bin. The Breeder Control calculates the material weight as the total weight less the zero (empty) weight value.

Example: A bin weighs 1200 pounds empty. In standard operation mode, simply press and hold on both the  and  keys until  displays. This would then set the zero value in the SETUP mode to 1200.

Segmented display:

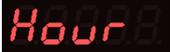


13. Press the SELECT key. The current zero value is shown. If zeroed in standard operation mode, simply record this value for future reference. If you need to adjust this value, use the  and  keys until the desired value for an empty bin is shown.
14. Press the SELECT key and **YEAR** is displayed.
15. Press the  key three times until **Hour** is displayed.

Hour

Sets the current hour in 24-hour (military) format. The default hour is set to CST and should be adjusted, if necessary, for your time zone.

Segmented display:



16. Press the SELECT key and the current hour is displayed. Use the  and  keys to enter the proper hour in 24-hour format.
17. Once the proper value is displayed, press SELECT and **00 00** is displayed.
18. Press the  key four times until **End** is displayed.

End

Allows the user to exit SETUP mode.

19. Press the SELECT button while **End** is displayed to exit SETUP mode.

Segmented display:



Startup

1. Inspect BinTrac installation on weigh bin and verify legs are evenly lifted and not binding.
2. Verify area under bin legs is free and clear of any material.
3. Check weighing accuracy
 - a. Have someone with known weight sit on bin cross-bar support as close to leg as possible to verify bracket assembly is accurately measuring weight.
 - b. Repeat on each cross-bar support.
4. **Important - Manually fill weigh bin with approximately 100 lbs. of feed to allow for overshoot and ensure flowability of feed during unload process.**
5. Zero Inventory Bin.
 - a. Make sure weigh bin is empty and in the Gross weight mode on the Breeder Console. Hold on both the  and  keys until the display shows 0.
 - b. Record Zero _____ (empty weight of bin) by viewing in SETUP Menu (Used for resetting the zero point of the scale if it is ever zeroed out with weight on the bin in the future).

Note: The batch filling of Weigh Bin must be completed one hour prior to starting the batching of the programmed feeding.

Operation

Press the SELECT key to select between Gross Weight and Batch Amount. The Gross Weight is the total material remaining in the bin. The bar graph indicates the approximate level of the bin. The Batch Amount is remaining weight left to batch to reach the Batch Target. Note: Batch Weight always starts at the Batch Target and counts down to "0" weight. This provides the best means to display the amount left to batch.

Manual Batch Run

1. Press the  key until **batch** is displayed.
2. Press SELECT to view the Batch Target Weight value.
3. Use the  key to increase the value by 1.
4. Use the  key to decrease the value by 1.
5. Press SELECT to display the batch run control status (**run** or **STOP**).
6. Use the  or  keys to enable or disable batch run control.
7. Press SELECT to start Batching if run was selected. The batch run will begin immediately.

Scheduled Batch Run

1. Press  key until **batch** is displayed.
2. Use the  key to select **Schdl**.
3. Press SELECT to view the hour and minute schedule.
4. Use the  key to select hour and minute to schedule batch.
Note: This is a 24-hour clock (i.e. 13:00 = 1:00pm)
5. Press SELECT to view the Batch Target Weight value.
6. Use the  key to increase the value by 1.
7. Use the  key to decrease the value by 1.
8. Press SELECT to display the batch run control status (**run** or **STOP**).

9. Use the  or  keys to enable or disable batch run control.
10. Press SELECT with **RUN** displayed. The Indicator will then display the batch amount and a countdown to the next batch run.
11. To stop a scheduled batch run, use the  key and **STOP** will be displayed. Press the SELECT key once to stop and again on the batch amount. The Indicator will then return to display the gross amount in the bin.

Pause Batch Run

1. To pause a batch in mid run, press the  key twice and **PAUSE** is displayed. Press SELECT key to pause the batch run.
2. When paused, the indicator will alternate between **PAUSE** and the remaining batch amount on the screen.
3. To restart the batch, press the  key until **RUN** is displayed then press the SELECT key. The batch will then continue until completed.

Display Fill Events

This procedure allows you to view the last four recorded fill events.

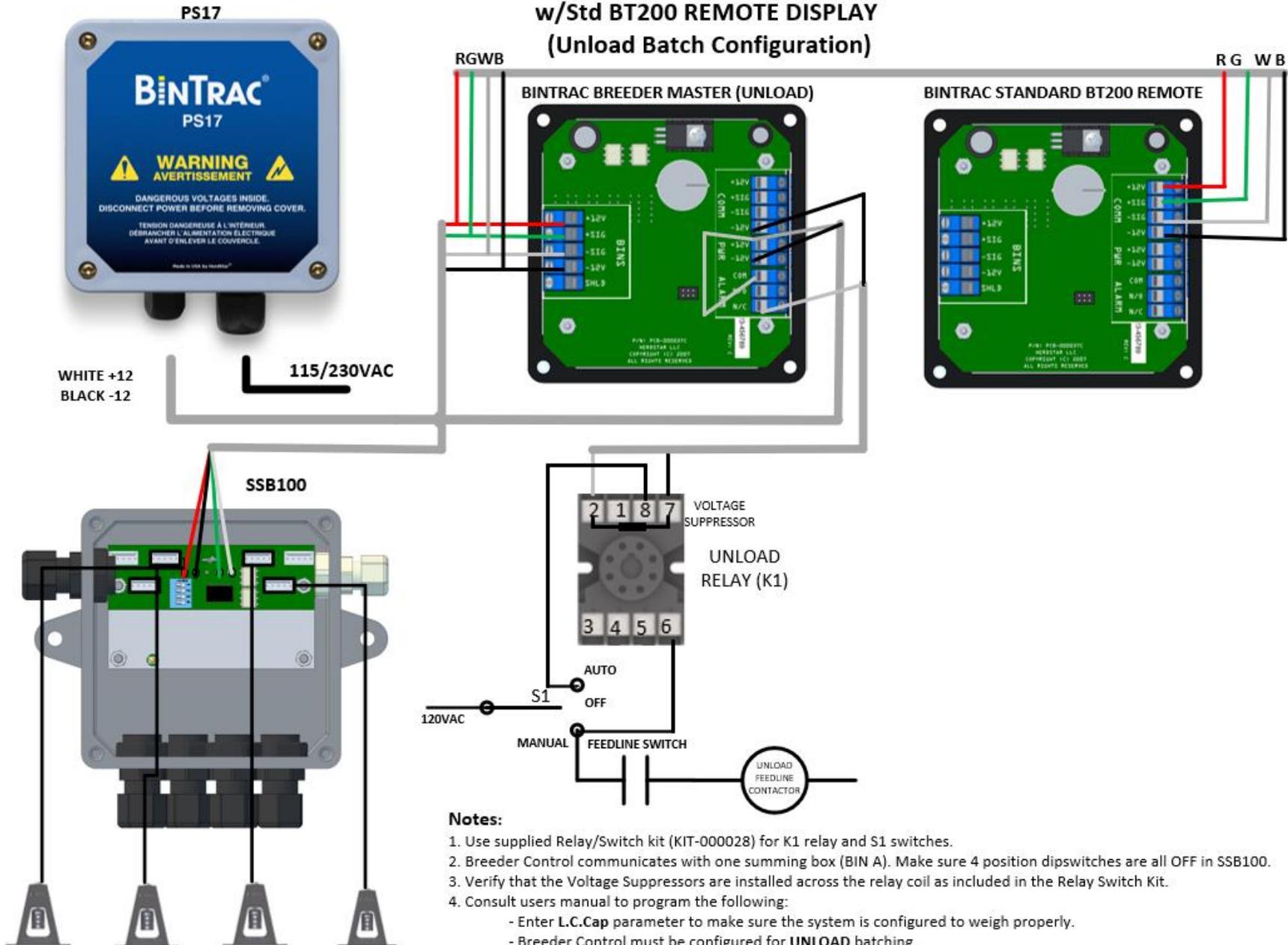
1. Press the  key until **FILL** is displayed.
2. Press SELECT to view the last recorded fill event.
3. Press the  key to view other prior recorded fill events.
4. Press SELECT to return to Weight Display mode or unit will return to Weight Display mode after a period of time with no activity (no keystrokes).

Display 24 Hour Usage

This procedure allows you to view the last four 24-hour usage amounts.

1. Press the  key twice until **USAGE** is displayed.
2. Press SELECT to view the last recorded 24-hour usage amount.
3. Press  key to view other prior recorded usage amounts.
4. Press SELECT to return to Weight Display mode or unit will return to Weight Display mode after a period of time with no activity (no keystrokes).

BINTRAC Breeder Control - Loss In Weight w/Std BT200 REMOTE DISPLAY (Unload Batch Configuration)



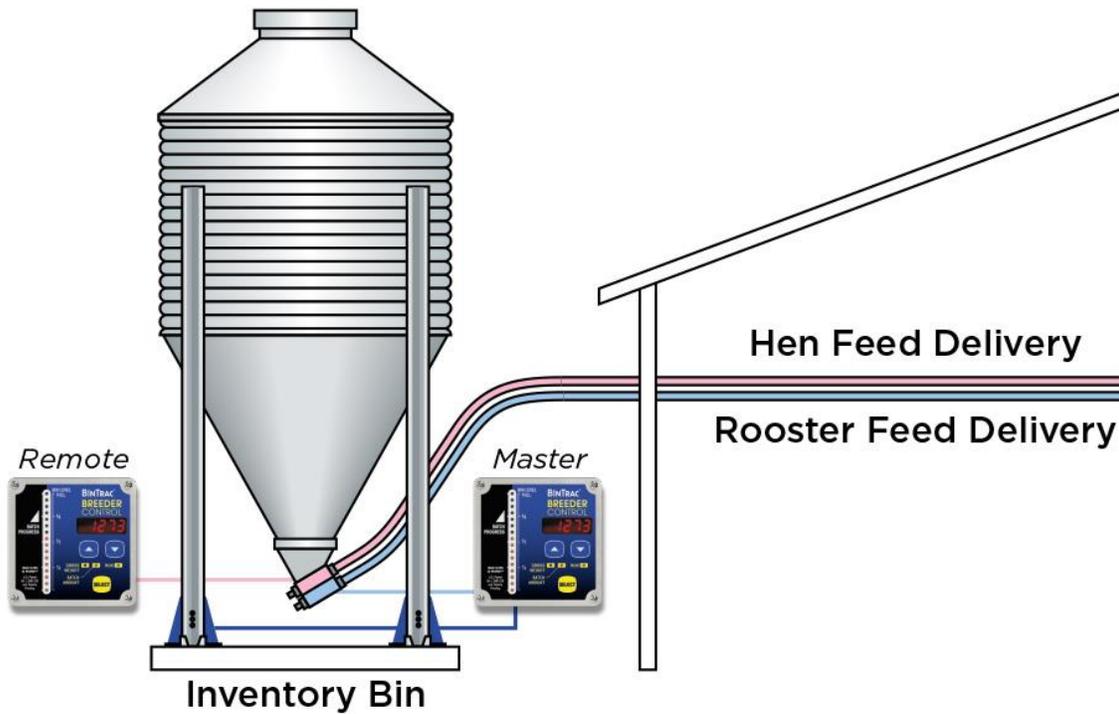
Notes:

1. Use supplied Relay/Switch kit (KIT-000028) for K1 relay and S1 switches.
2. Breeder Control communicates with one summing box (BIN A). Make sure 4 position dipswitches are all OFF in SSB100.
3. Verify that the Voltage Suppressors are installed across the relay coil as included in the Relay Switch Kit.
4. Consult users manual to program the following:
 - Enter L.C.Cap parameter to make sure the system is configured to weigh properly.
 - Breeder Control must be configured for UNLOAD batching.
 - MASTER Unit must have SETUP D enabled for Peripherals.

Inventory Bin with Dual Breeder Console Unloads

Overview

This configuration provides automated batching for hens and roosters from a single inventory bin. A Master Breeder Console provides automated batching of a programmed amount of rooster feed as a loss-in-weight (unload) from an inventory bin by enabling and disabling the rooster withdrawal auger. A Remote Breeder Console provides automated batching of a user programmed amount of hen feed as a loss-in-weight for the same inventory bin by enabling and disabling the hen withdrawal auger. Toggle switches for each withdrawal auger provide auto and manual override of each auger. The following describes the setup and operation of this configuration.



Setup Parameters

Follow the system wiring diagram ([Page 36](#)) to aid in the installation process, including supplied relays and switches. Once installation is completed, both the MASTER and the REMOTE Breeder control units must be programmed as summarized below:

1. MASTER Breeder Control console controls the rooster unload batching withdrawal auger (**steps 1 through 19**).

Access SETUP mode and configure the following:

- Enable Peripherals (RUN LED) under the SETUP menu
- Validate that the Batch type is set to Unload Batching
- Set an **L.C.CAP** value that matches the total capacity of all load cells
- Set a **FuLL** value that matches the maximum capacity of the weigh bin
- Set the **Hour** time parameter (default is CST Zone)

2. REMOTE Breeder Console controls the hen unload batching withdrawal auger (**steps 20 through 27**).

Access SETUP mode and configure/verify the following:

- Validate Remote Display feature is enabled (GROSS WEIGHT LED solid on) under the SETUP menu, as this feature will be automatically set once the unit is connected properly to the Master Breeder unit
- Verify that the batch type is set to Unload Batching
- Validate that the **L.C.CAP** value matches what was entered on the MASTER display

System Settings in Setup Mode - MASTER

The SETUP mode is used to configure the one-time system setup settings for the appropriate configuration. The following SETUP parameters MUST be correctly configured on the MASTER Breeder console to ensure proper operation and weighing:

- SETUP
- BATCH
- L.C.CAP
- FULL
- ZERO
- HOUR

NOTE: When first powering on the unit **SEE.LC** will be displayed, simply as a reminder that the load cell capacity for the system must be entered in the SETUP menu to ensure proper weighing calibration.

NOTE: If there is no activity for a period of time while in SETUP mode, the system will exit and return to the Weight Display mode.

Navigating Setup Mode

To navigate through the options in SETUP mode, use the and keys to cycle through the options/parameters. See the SETUP menu flow chart to the right.

Accessing the Setup Mode

1. Press and hold the SELECT button down until **SEtUP** is displayed.

Segmented display:

Enabling Peripherals in Setup Mode

In the SETUP Mode, the four LEDs indicate configuration options as being enabled (solid on) or disabled (flashing). For this configuration, only the RUN LED should be solid on, enabling communication to peripherals.

- GROSS WEIGHT - Configures a BinTrac or Breeder Indicator as a Remote Display automatically when connected to a Master Breeder Control with Peripheral Devices enabled.
- BATCH AMT - NOT USED
- LED (left of RUN) - NOT USED
- RUN - Enable communications to Peripheral devices. Must be enabled when Breeder Control is connected to a Remote Display device (REMOTE BinTrac Indicator or Breeder Control console).

2. Press the SELECT key four times and then press the key to enable Peripherals in the SETUP mode (RUN LED will be on solid). Press the SELECT key and then **bAtch** will be displayed.

Batch

Enables you to set the batch option to **LoAd** or **u.LoAd**. In this configuration, the parameter MUST be set for **u.LoAd** for the rooster unload batching auger.

Segmented display:

3. Press the SELECT key to enter BATCH menu, and **u.LoAd** should be displayed (If **LoAd** is displayed press to set to **u.LoAd**).
4. Press the SELECT key and then **rAtEd** is shown.
5. Press and **L.C.CAP** is displayed.



SETUP Menu Flow Chart

Capacity (L.C.CAP)

The load cell system capacity is the sum of all the load cells rated capacity in either pounds or kilograms. This parameter sets the calibration of the system. To determine this value, multiply the number of load cells by their capacity.

Example: A four leg bin with 5k load cells would require an L.C.CAP setting of 20000 pounds.

Segmented display:



6. Press the SELECT key. The display will show the current setting (default is 30000).
7. Use the  and  keys to increase or decrease the value. Hold the key down to increase/decrease quickly.
8. Upon setting the appropriate value, press SELECT and the display will show .
9. Press the  key and **FULL** is displayed.

Full Value

This value is the maximum weight of a full bin in either pounds or kilograms as is for calibration of the LED bar graph level. The value determines at what weight the bar graph will display completely full (all 16 LEDs lit). Set this to the maximum amount of feed that you would consider the bin to be full.

Segmented display:



10. Press the SELECT key.
11. Use the  and  keys to increase or decrease the value. Hold the key down to increase/decrease quickly.
12. Upon setting the appropriate value, press SELECT and the display will show .

Zero Value

Sets the weight of the empty bin in either pounds or kilograms. Convenient when wanting to calibrate a system when a small amount of feed is already in the bin. The zero value is used to compensate for the empty weight of the bin to give an accurate value for the net weight of the material inside the bin. The Breeder Control calculates the material weight as the total weight less the zero (empty) weight value.

Example: A bin weighs 1200 pounds empty. In standard operation mode, simply press and hold on both the  and  keys until  displays. This would then set the zero value in the SETUP mode to 1200.

Segmented display:



13. Press the SELECT key. The current zero value is shown. If zeroed in standard operation mode, simply record this value for future reference. If you need to adjust this value, use the  and  keys until the desired value for an empty bin is shown.
14. Press the SELECT key and **YEAR** is displayed.
15. Press the  key three times until **Hour** is displayed.

Hour

Sets the current hour in 24-hour (military) format. The default hour is set to CST and should be adjusted, if necessary, for your time zone.

Segmented display:



16. Press the SELECT key and the current hour is displayed. Use the  and  keys to enter the proper hour in 24-hour format.
17. Once the proper value is displayed, press SELECT and **nn nn** is displayed.
18. Press the  key four times until **End** is displayed.

End

Allows the user to exit SETUP mode.

19. Press the SELECT button while **End** is displayed to exit SETUP mode.

Segmented display:



System Settings in Setup Mode - REMOTE

The SETUP mode is used to configure the one-time system setup settings for the appropriate configuration. The following SETUP parameters MUST be correctly configured on the REMOTE Breeder console to ensure proper operation and weighing:

- SETUP
- BATCH
- L.C.CAP

NOTE: When first powering on the unit, **SEt.LC** will be displayed. This is simply a reminder that the load cell capacity for the system must be entered in the SETUP menu to ensure proper weighing calibration.

NOTE: If there is no activity for a period of time while in SETUP mode, the system will exit and return to the Weight Display mode.

Navigating Setup Mode

To navigate through the options in SETUP mode, use the and keys to cycle through the options/parameters. See the SETUP menu flow chart to the right.

Accessing the Setup Mode

20. Press and hold the SELECT button down until **SEtUP** is displayed.

Segmented display:



Enabling Peripherals in Setup Mode

In the SETUP Mode, the four LEDs indicate configuration options as being enabled (solid on) or disabled (flashing). For this configuration, only the GROSS WEIGHT LED should be solid on, enabling the unit as a Remote Display.

Note: If the MASTER Indicator has already been set to enable peripherals and is connected to the REMOTE display, the GROSS WEIGHT LED should already be solid on in the SETUP menu. If this is the case, simply press the key once to move to **bAtch** and then skip step 21.

21. Press the SELECT key one time and then use the key to enable Remote Display in the SETUP mode (GROSS WEIGHT LED should be on solid on). Press the SELECT key four times and **bAtch** will be displayed.

- | | |
|---|---|
| <input checked="" type="radio"/> GROSS WEIGHT | -Configures a BinTrac or Breeder Indicator as a Remote Display automatically when connected to a Master Breeder Control with Peripheral Devices enabled. |
| <input type="radio"/> BATCH AMT | -NOT USED |
| <input type="radio"/> LED (left of RUN) | -NOT USED. |
| <input type="radio"/> RUN | -Enable communications to Peripheral devices. Must be enabled when Breeder Control is connected to Remote Display device (REMOTE BinTrac Indicator or Breeder Control console). |



SETUP Menu Flow Chart

Batch

Enables you to set the batch option to **LoAd** or **u.LoAd**. In this configuration, the parameter MUST be set for **u.LoAd** for the hen unload batching auger.

Segmented display:



22. Press the SELECT key to enter BATCH menu, and **u.LoAd** should be displayed (If **LoAd** is displayed, press  to set to **u.LoAd**).
23. Press the SELECT key and then **rAtEd** is shown.
24. Press  and **L.C.CAP** is displayed.

Capacity (L.C.Cap)

The load cell system capacity is the sum of all the load cells rated capacity in either pounds or kilograms. This parameter sets the calibration of the system. To determine this value, multiply the number of load cells by their capacity.

Example: A four leg bin with 5k load cells would require an **L.C.CAP** setting of 20000 pounds.

Segmented display:



25. Press the SELECT key.
26. The REMOTE display will mirror the value you entered on the MASTER display. Verify that this is the case and that the L.C.CAP matches what you entered on the MASTER display. Now, press the SELECT key.

End

Allows the user to exit SETUP mode.

27. Press the  key 5 times until **End** is displayed. Press the SELECT key to exit SETUP mode.

Segmented display:



Startup

1. Inspect BinTrac installation on weigh bin and verify legs are evenly lifted and not binding.
2. Verify area under bin legs is free and clear of any material.
3. Check weighing accuracy
 - a. Have someone with known weight sit on bin cross-bar support as close to leg as possible to verify bracket assembly is accurately measuring weight.
 - b. Repeat on each cross-bar support.
4. **Important - Manually fill weigh bin with approximately 100 lbs. of feed to allow for overshoot and ensure flowability of feed during unload process.**
5. On Master Breeder Console, zero Inventory Bin.
 - a. Make sure weigh bin is empty and in the Gross weight mode on the Master Breeder Console. Hold on both the  and  keys until the display shows . **Note: Bin cannot be zeroed from Remote Breeder.**
 - b. Verify both Master and Remote are displaying .
 - c. Record Zero _____ (empty weight of bin) by viewing in SETUP Menu (Used for resetting the zero point of the scale if it is ever zeroed out with weight on the bin in the future).

Note: The batch filling of Weigh Bin must be completed one hour prior to starting the batching of the programmed feeding.

Operation

Programmed Rooster Feeding with Master Breeder Console

1. Verify Remote Breeder Console is not in Run mode for batching rooster feeding.
2. Switch rooster feeding Auto/OFF/On toggle switch to Auto.
3. Press the  key once and **batch** will be displayed.
4. Press SELECT to view the Batch Target Weight value. The last programmed Batch Target Weight value will be displayed.
5. Use the  or  key to adjust the Batch Target Weight. The weight entered will be automatically saved for the next batch cycle.
6. Press SELECT to display the batch run control status (**run** or **STOP**).
7. Press the  or  keys until **run** is displayed.
8. Press SELECT to start Batching. The batch run will immediately enable the withdrawal auger, indicated by RUN LED solid on. When the Batch Target Weight amount has been reached, the withdrawal auger will automatically be disabled.

Programmed Hen Feeding with Remote Breeder Console

1. Verify Master Breeder Console is not in Run mode for batching hen feeding.
2. Switch Hen Feeding Auto/OFF/On toggle switch to Auto.
3. Press the  key once and **batch** will be displayed.
4. Press SELECT to view the Batch Target Weight value. The last programmed Batch Target Weight value will be displayed.

5. Use the  or  key to adjust the Batch Target Weight. The weight entered will be automatically saved for the next batch cycle.
6. Press SELECT to display the batch run control status (**RUN** or **STOP**).
7. Press the  or  key until **RUN** is displayed.
8. Press SELECT to start Batching. The batch run will immediately enable the withdrawal auger, indicated by RUN LED solid on. When the Batch Target Weight amount has been reached, the withdrawal auger will automatically be disabled.

Pause Batch Run

1. To pause a batch in mid run, press the  key twice and **PAUSE** is displayed. Press SELECT key to pause the batch run.
2. When paused, the indicator will alternate between **PAUSE** and the remaining batch amount on the screen.
3. To restart the batch, press the  key until **RUN** is displayed, then press the SELECT key. The batch will then continue until completed.

Display Fill Events

This procedure allows you to view the last four recorded fill events.

1. Press the  key until **FILL** is displayed.
2. Press SELECT to view the last recorded fill event.
3. Press the  key to view other prior recorded fill events.
4. Press SELECT to return to Weight Display mode or unit will return to Weight Display mode after a period of time with no activity (no keystrokes).

Display 24 Hour Usage

This procedure allows you to view the last four 24-hour usage amounts.

1. Press the  key twice until **USAGE** is displayed.
2. Press SELECT to view the last recorded 24-hour usage amount.
3. Press  key to view other prior recorded usage amounts.
4. Press SELECT to return to Weight Display mode or unit will return to Weight Display mode after a period of time with no activity (no keystrokes).

Optional - Scheduled Feeding Unload from Weigh Bin

Unload from the weigh bin the programmed net weight amount at a scheduled time daily.

1. Switch Feeding Auto/OFF/On toggle switch to Auto.
2. Press the  key once and **batch** will be displayed.
3. Press the  key a second time and **SchDL** will be displayed. Press SELECT to display the current scheduled time.
4. Use the  or  key to select the schedule (hour and minute) for the batch to start.

Note: This is a 24-hour clock. i.e. 13:00 = 1:00 p.m. Once entered, the time will be saved until changed.

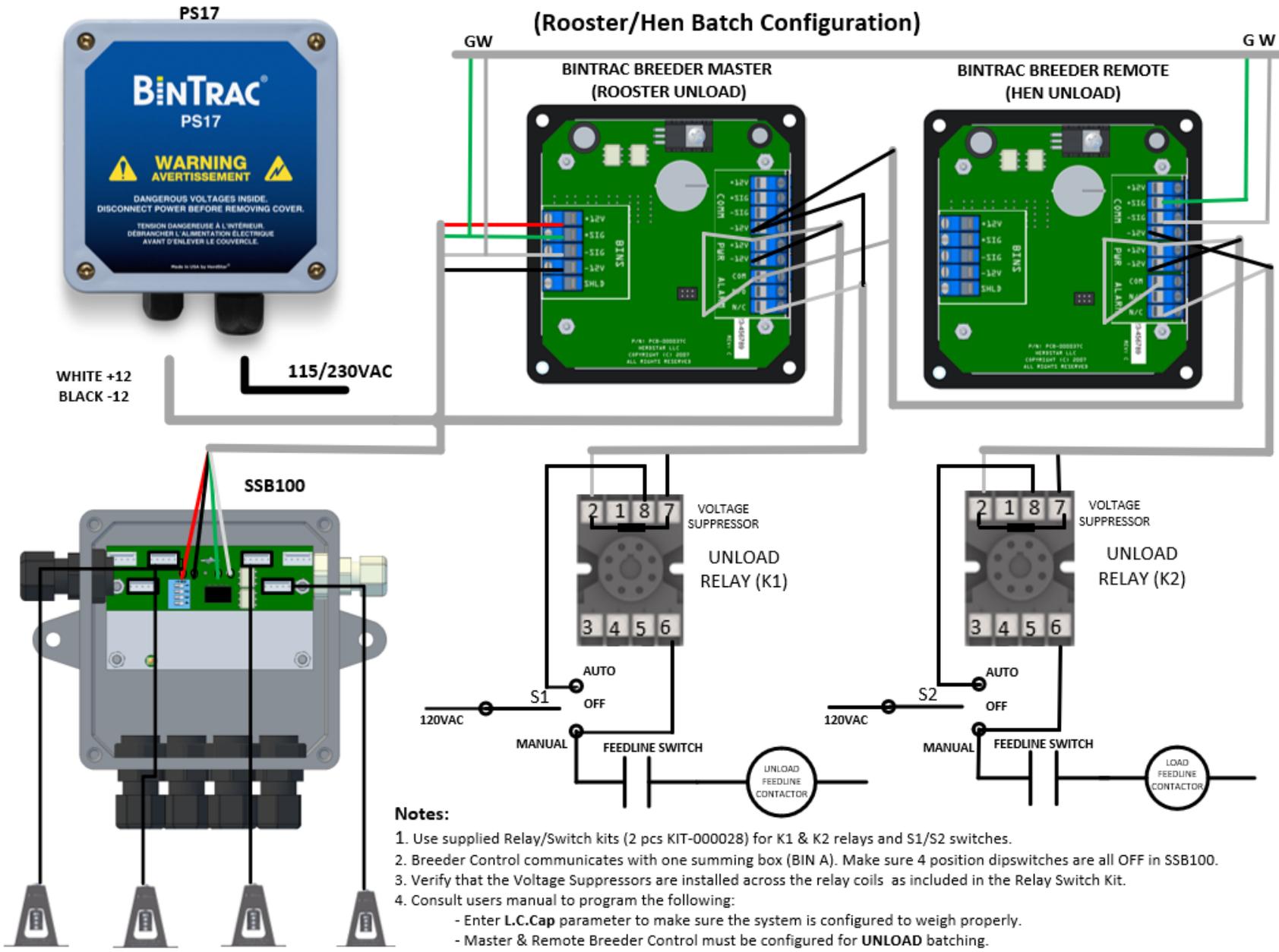
5. Press SELECT to view the Batch Target Weight value. Last programmed Batch Target Weight value will be displayed.

6. Use the  or  key to adjust the Hens Batch Target Weight (for example, 2500 lbs.). The weight entered will be automatically saved for the next Scheduled batch cycle.
7. Press SELECT to display the batch run control status (RUN or STOP).
8. Press the  or  keys until RUN is displayed, then press SELECT. The Indicator will then display the batch amount and a countdown of the minutes until the next batch run. Once the scheduled time occurs, the withdrawal auger will be enabled (indicated by RUN LED solid on). When the Batch Target Weight amount has been discharged, the withdrawal auger will automatically be disabled and the batch cycle time will start counting down for the next scheduled batch.

Stopping a Scheduled Batch Run

1. To stop a Scheduled Batch Run, use the  key once and STOP will be displayed. Press the SELECT key.

Dual Breeder Controls for Dual Unload (Rooster/Hen Batch Configuration)



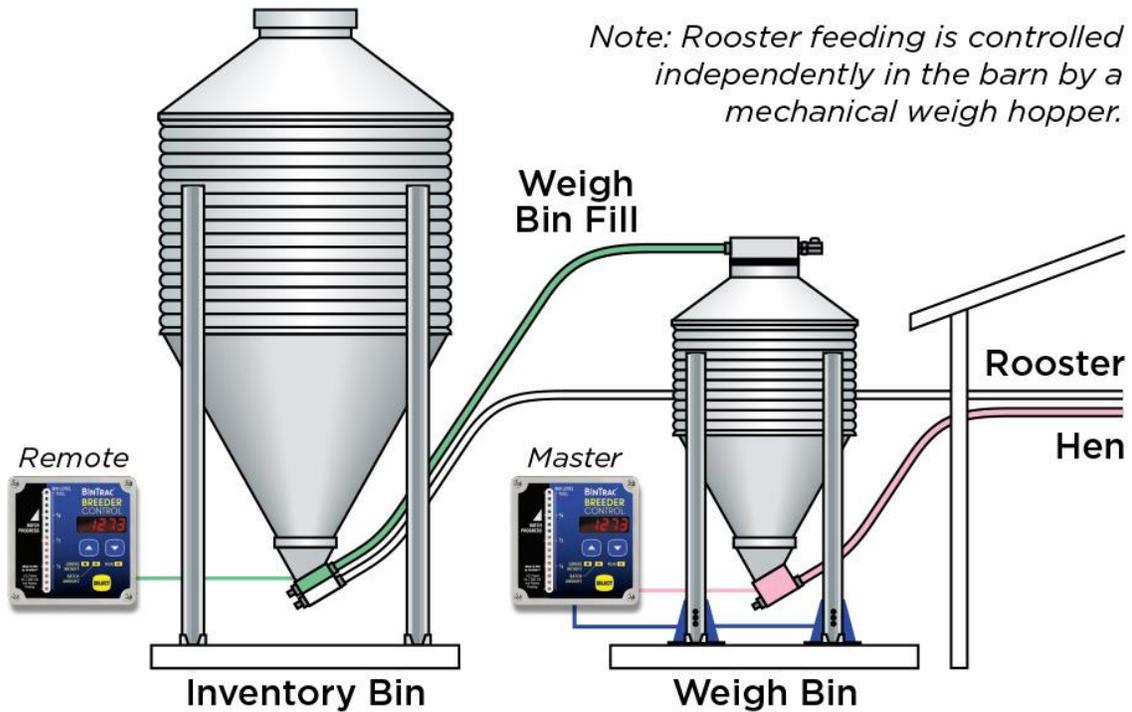
Notes:

1. Use supplied Relay/Switch kits (2 pcs KIT-000028) for K1 & K2 relays and S1/S2 switches.
2. Breeder Control communicates with one summing box (BIN A). Make sure 4 position dipswitches are all OFF in SSB100.
3. Verify that the Voltage Suppressors are installed across the relay coils as included in the Relay Switch Kit.
4. Consult users manual to program the following:
 - Enter **L.C.Cap** parameter to make sure the system is configured to weigh properly.
 - Master & Remote Breeder Control must be configured for **UNLOAD** batching.
 - MASTER Unit must have **SETUP D** enabled for Peripherals.

Weigh Bin with Dual Breeder Consoles for Programmed Fill and Batch Configuration

Overview

This configuration provides automated filling and batching of hen feed using a weigh bin. A Remote Breeder Console provides automated filling of a programmed gross weight amount into a weigh bin. A Master Breeder Console provides automated loss-in-weight batching of a programmed amount for the hen feeding. Toggle switches for each control will allow auto and manual override operation of their control auger. The following describes the setup and operation of this configuration.



Setup Parameters

Follow the system wiring diagram ([Page 47](#)) to aid in the installation process, including supplied relays and switches. Once installation is completed, both the MASTER and the REMOTE Breeder control units must be programmed as summarized below:

1. MASTER Breeder Control console controls the hen unload batching withdrawal auger (**steps 1 through 19**).

Access SETUP mode and configure the following:

- Enable Peripherals (RUN LED) under the SETUP menu.
- Validate that the Batch type is set to Unload Batching.
- Set an **L.C.CAP** value that matches the total capacity of all load cells.
- Set a **FuLL** value that matches the maximum capacity of the weigh bin.
- Set the **Hour** time parameter (default is CST Zone).

2. REMOTE Breeder Console controls the weigh bin fill auger (**steps 20 through 27**).

Access SETUP mode and configure/verify the following:

- Validate Remote Display feature is enabled (GROSS WEIGHT LED solid on) under the SETUP menu, as this feature will be automatically set once the unit is connected properly to the Master Breeder unit.
- Verify that the batch type is set to Load Batching.

System Settings in Setup Mode - MASTER

The SETUP mode is used to configure the one-time system setup settings for the appropriate configuration. The following SETUP parameters MUST be correctly configured on the MASTER Breeder console to ensure proper operation and weighing:

- SETUP
- BATCH
- L.C.CAP
- FULL
- ZERO
- HOUR

NOTE: When first powering on the unit **SEt.LC** will be displayed, simply as a reminder that the load cell capacity for the system must be entered in the SETUP menu to ensure proper weighing calibration.

NOTE: If there is no activity for a period of time while in SETUP mode, the system will exit and return to the Weight Display mode.

Navigating Setup mode

To navigate through the options in SETUP mode, use the and keys to cycle through the options/parameters. See the SETUP menu flow chart to the right.



SETUP Menu Flow Chart

Accessing the Setup mode

1. Press and hold the SELECT button down until **SEtUP** is displayed.

Segmented display:



Enabling Peripherals in Setup mode

In the SETUP Mode, the four LEDs indicate configuration options as being enabled (solid on) or disabled (flashing). For this configuration, only the RUN LED should be solid on, enabling communication to peripherals.

- GROSS WEIGHT - Configures a BinTrac or Breeder Indicator as a Remote Display automatically when connected to a Master Breeder Control with Peripheral Devices enabled.
- BATCH AMT - NOT USED
- LED (left of RUN) - NOT USED
- RUN - Enable communications to Peripheral devices. Must be enabled when Breeder Control is connected to a Remote Display device (REMOTE BinTrac Indicator or Breeder Control console)

2. Press the SELECT key four times and then press the key to enable Peripherals in the SETUP mode (RUN LED will be on solid). Press the SELECT key and then **bAtch** will be displayed.

Batch

Enables you to set the batch option to **LoAd** or **u.LoAd**. In this configuration, the parameter MUST be set for **u.LoAd** for the hen unload batching auger.

Segmented display:



3. Press the SELECT key to enter BATCH menu, and **u.LoAd** should be displayed (If **LoAd** is displayed press to set to **u.LoAd**).
4. Press the SELECT key and then **rAtEd** is shown.
5. Press and **L.C.CAP** is displayed.

Capacity (L.C.CAP)

The load cell system capacity is the sum of all the load cells rated capacity in either pounds or kilograms. This parameter sets the calibration of the system. To determine this value, multiply the number of load cells by their capacity.

Example: A four leg bin with 5k load cells would require an L.C.CAP setting of 20000 pounds.

Segmented display:



6. Press the SELECT key. The display will show the current setting (default is 30000).
7. Use the  and  keys to increase or decrease the value. Hold the key down to increase/decrease quickly.
8. Upon setting the appropriate value, press SELECT and the display will show .
9. Press the  key and **FULL** is displayed.

Full Value

This value is the maximum weight of a full bin in either pounds or kilograms as is for calibration of the LED bar graph level. The value determines at what weight the bar graph will display completely full (all 16 LEDs lit). Set this to the maximum amount of feed that you would consider the bin to be full.

Segmented display:



10. Press the SELECT key.
11. Use the  and  keys to increase or decrease the value. Hold the key down to increase/decrease quickly.
12. Upon setting the appropriate value, press SELECT and the display will show .

Zero Value

Sets the weight of the empty bin in either pounds or kilograms. Convenient when wanting to calibrate a system when a small amount of feed is already in the bin. The zero value is used to compensate for the empty weight of the bin to give an accurate value for the net weight of the material inside the bin. The Breeder Control calculates the material weight as the total weight less the zero (empty) weight value.

Example: A bin weighs 1200 pounds empty. In standard operation mode, simply press and hold on both the  and  keys until  displays. This would then set the zero value in the SETUP mode to 1200.

Segmented display:



13. Press the SELECT key. The current zero value is shown. If zeroed in standard operation mode, simply record this value for future reference. If you need to adjust this value, use the  and  keys until the desired value for an empty bin is shown.
14. Press the SELECT key and **YEAR** is displayed.
15. Press the  key three times until **Hour** is displayed.

Hour

Sets the current hour in 24-hour (military) format. The default hour is set to CST and should be adjusted, if necessary, for your time zone.

Segmented display:



16. Press the SELECT key and the current hour is displayed. Use the  and  keys to enter the proper hour in 24-hour format.
17. Once the proper value is displayed, press SELECT and **nn nn** is displayed.
18. Press the  key four times until **End** is displayed.

End

Allows the user to exit SETUP mode.

19. Press the SELECT button while **End** is displayed to exit SETUP mode.

Segmented display:



System Settings in Setup Mode - REMOTE

The SETUP mode is used to configure the one-time system setup settings for the appropriate configuration. The following SETUP parameters MUST be correctly configured on the REMOTE Breeder console to ensure proper operation and weighing:

- SETUP
- BATCH
- L.C.CAP

NOTE: When first powering on the unit, **SEt.LC** will be displayed. This is simply a reminder that the load cell capacity for the system must be entered in the SETUP menu to ensure proper weighing calibration.

NOTE: If there is no activity for a period of time while in SETUP mode, the system will exit and return to the Weight Display mode.

Navigating Setup Mode

To navigate through the options in SETUP mode, use the and keys to cycle through the options/parameters. See the SETUP menu flow chart to the right.

Accessing the Setup Mode

20. Press and hold the SELECT button down until **SEtUP** is displayed.

Segmented display:



Enabling Peripherals in Setup Mode

In the SETUP Mode, the four LEDs indicate configuration options as being enabled (solid on) or disabled (flashing). For this configuration, only the GROSS WEIGHT LED should be solid on, enabling the unit as a Remote Display.

Note: If the MASTER Indicator has already been set to enable peripherals and is connected to the REMOTE display, the GROSS WEIGHT LED should already be solid on in the SETUP menu. If this is the case, simply press the key once to move to **bAtch** and then skip step 21.

21. Press the SELECT key one time and then use the key to enable Remote Display in the SETUP mode (GROSS WEIGHT LED should be on solid on). Press the SELECT key four times and **bAtch** will be displayed.

- GROSS WEIGHT -Configures a BinTrac or Breeder Indicator as a Remote Display automatically when connected to a Master Breeder Control with Peripheral Devices enabled.
- BATCH AMT -NOT USED
- LED (left of RUN) -NOT USED.
- RUN -Enable communications to Peripheral devices. Must be enabled when Breeder Control is connected to a Remote Display device (REMOTE BinTrac Indicator or Breeder Control console).



SETUP Menu Flow Chart

Batch

Enables you to set the batch option to **LoAd** or **u.LoAd**. In this configuration, the parameter MUST be set for **LoAd** for the Remote Breeder Console to provide automated filling of a programmed gross weight amount into the weigh bin.

Segmented display:



22. Press the SELECT key to enter BATCH menu, and **u.LoAd** should be displayed. Press  to set to **LoAd**.
23. Press the SELECT key and then **rAtEd** is shown.
24. Press  and **L.C.CAP** is displayed.

Capacity (L.C.Cap)

The load cell system capacity is the sum of all the load cells rated capacity in either pounds or kilograms. This parameter sets the calibration of the system. To determine this value, multiply the number of load cells by their capacity.

Example: A four leg bin with 5k load cells would require an L.C.CAP setting of 20000 pounds.

Segmented display:



25. Press the SELECT key.
26. The REMOTE display will mirror the value you entered on the MASTER display. Verify that this is the case and that the L.C.CAP matches what you entered on the MASTER display. Now, press the SELECT key.

End

Allows the user to exit SETUP mode.

27. Press the  key 5 times until **End** is displayed. Press the SELECT key to exit SETUP mode.

Segmented display:



Startup

1. Inspect BinTrac installation on weigh bin and verify legs are evenly lifted and not binding.
2. Verify area under bin legs is free and clear of any material.
3. Check weighing accuracy
 - a. Have someone with known weight sit on bin cross-bar support as close to leg as possible to verify bracket assembly is accurately measuring weight.
 - b. Repeat on each cross-bar support.
4. **Important - Manually fill weigh bin with approximately 100 lbs. of feed to allow for overshoot and ensure flowability of feed during unload process.**
5. On Master Breeder Console, zero Inventory Bin.
 - a. Make sure weigh bin is empty and in the Gross weight mode on the Master Breeder Console. Hold on both the  and  keys until the display shows . **Note: Bin cannot be zeroed from Remote Breeder.**
 - b. Verify both Master and Remote are displaying .
 - c. Record Zero _____ (empty weight of bin) by viewing in SETUP Menu (Used for resetting the zero point of the scale if it is ever zeroed out with weight on the bin in the future).

Note: The batch filling of Weigh Bin must be completed one hour prior to starting the batching of the programmed feeding.

Operation

Programmed Weigh Bin Load with Remote Breeder Console

Load the weigh bin up to the programmed target gross weight level.

1. Switch Load Auto/OFF/On toggle switch to Auto.
2. Ensure programmed feeding from Weigh Bin Operation is not in progress.
3. Press the  key once and **batch** will be displayed.
4. Press SELECT to view the last programmed Batch Target Weight value.
5. Use the  or  key to adjust the Batch Target Weight (gross weight). **Note: This amount must be greater than the amount to be batched for the Unload feeding.**
6. Press SELECT to display the batch run control status (**run** or **STOP**).
7. Press the  or  keys until **run** is displayed.
8. Press SELECT to start Batching. The batch run will immediately enable the fill auger, indicated by the RUN LED showing solid on. When the Batch Target Weight amount has been reached, the fill auger will automatically be disabled.

Programmed Hen Feeding Unload from Weigh Bin with Master Breeder Console

Unload the programmed net weight amount from the weigh bin.

1. Switch Feeding Auto/OFF/On toggle switch to Auto.
2. Ensure Weigh Bin fill operation has completed and weight of feed in bin exceeds the amount to be unloaded.
3. Press the  key once and **batch** will be displayed.

4. Press SELECT to view the Batch Target Weight value. The last programmed Batch Target Weight value will be displayed.
5. Use the  or  key to adjust the Batch Target Weight. The weight entered will be automatically saved for the next batch cycle. **Note: The Batch Target Weight must be less than the current gross weight amount of feed in the bin.**
6. Press SELECT to display the batch run control status (**RUN** or **STOP**).
7. Press the  or  key until **RUN** is displayed.
8. Press SELECT to start Batching. The batch run will immediately enable the withdrawal auger, indicated by RUN LED showing solid on. When the Batch Target Weight amount has been reached, the withdrawal auger will automatically be disabled.

Pause Batch Run

1. To pause a batch in mid run, press the  key twice and **PAUSE** is displayed. Press SELECT key to pause the batch run.
2. When paused, the indicator will alternate between **PAUSE** and the remaining batch amount on the screen.
3. To restart the batch, press the  key until **RUN** is displayed then press the SELECT key. The batch will then continue until completed.

Display Fill Events

This procedure allows you to view the last four recorded fill events.

1. Press the  key until **FILL** is displayed.
2. Press SELECT to view the last recorded fill event.
3. Press the  key to view other prior recorded fill events.
4. Press SELECT to return to Weight Display mode or unit will return to Weight Display mode after a period of time with no activity (no keystrokes).

Display 24 Hour Usage

This procedure allows you to view the last four 24-hour usage amounts.

1. Press the  key twice until **USAGE** is displayed.
2. Press SELECT to view the last recorded 24-hour usage amount.
3. Press  key to view other prior recorded usage amounts.
4. Press SELECT to return to Weight Display mode or unit will return to Weight Display mode after a period of time with no activity (no keystrokes).

Optional - Scheduled Feeding Unload from Weigh Bin

Unload the programmed net weight amount from the weigh bin at a scheduled time daily.

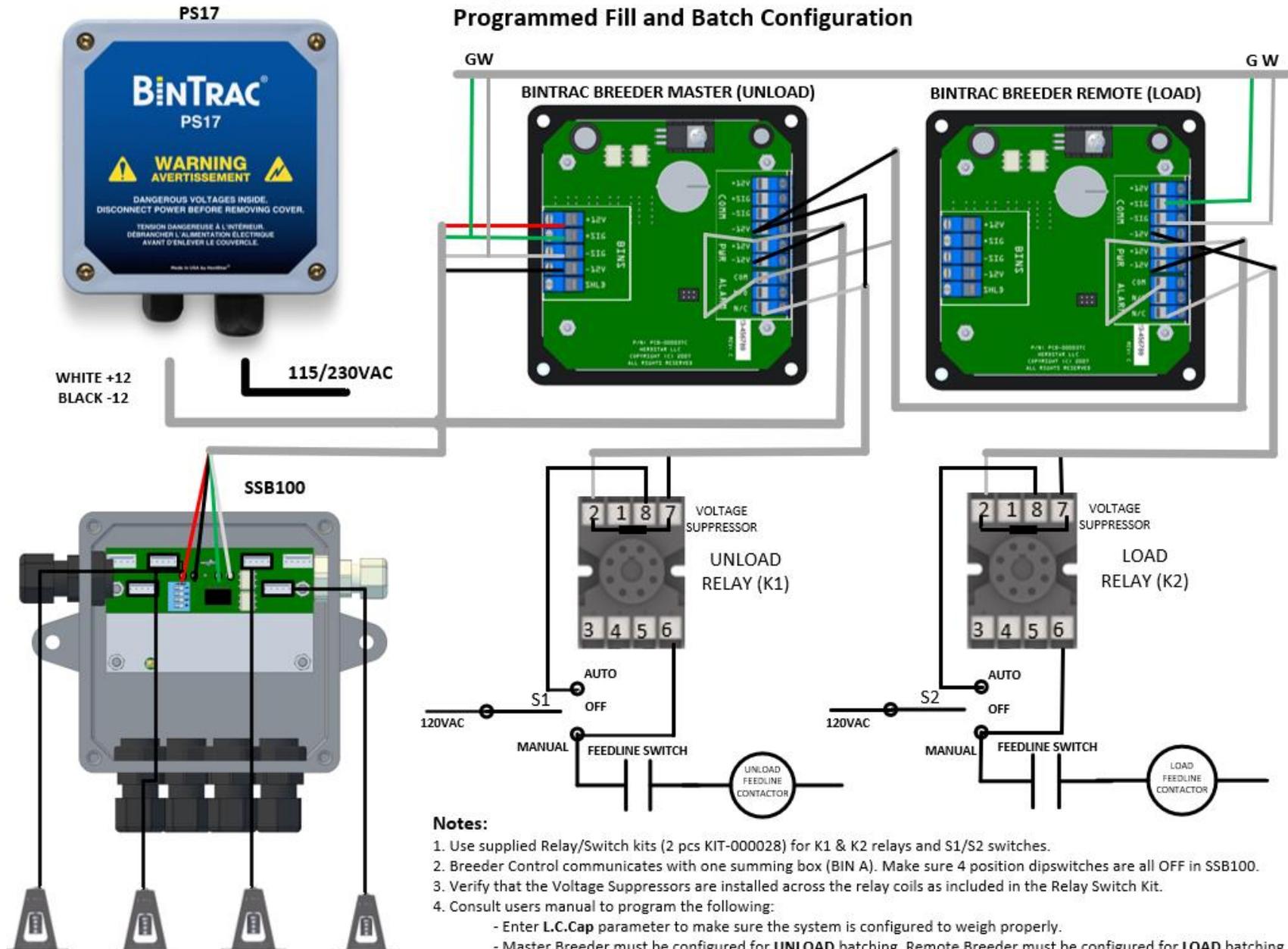
1. Switch Feeding Auto/OFF/On toggle switch to Auto.
2. Press the  key once and **batch** will be displayed.
3. Press the  key a second time and **SchDL** will be displayed. Press SELECT to display the current scheduled time.

4. Use the  or  key to select the schedule (hour and minute) for the batch to start.
Note: This is a 24-hour clock, i.e. 13:00 = 1:00pm. Once entered, the time will be saved until changed.
5. Press SELECT to view the Batch Target Weight value. Last programmed Batch Target Weight value will be displayed.
6. Use the  or  key to adjust the Hens Batch Target Weight (Example: 2500 lbs.). The weight entered will be automatically saved for the next Scheduled batch cycle.
7. Press SELECT to display the batch run control status (**RUN** or **STOP**).
8. Press the  or  keys until **RUN** is displayed, then press SELECT. The Indicator will then display the batch amount and a countdown of the minutes until the next batch run. Once the scheduled time occurs, the withdrawal auger will be enabled (indicated by RUN LED solid on). When the Batch Target Weight amount has been discharged, the withdrawal auger will automatically be disabled and the batch cycle time will start counting down for the next scheduled batch.

Stopping a Scheduled Batch Run

1. To stop a Scheduled Batch Run, use the  key once and **STOP** will be displayed. Press the SELECT key.

Weigh Bin with Dual Breeder Controls for Programmed Fill and Batch Configuration



Notes:

1. Use supplied Relay/Switch kits (2 pcs KIT-000028) for K1 & K2 relays and S1/S2 switches.
2. Breeder Control communicates with one summing box (BIN A). Make sure 4 position dippers are all OFF in SSB100.
3. Verify that the Voltage Suppressors are installed across the relay coils as included in the Relay Switch Kit.
4. Consult users manual to program the following:
 - Enter **L.C.Cap** parameter to make sure the system is configured to weigh properly.
 - Master Breeder must be configured for **UNLOAD** batching. Remote Breeder must be configured for **LOAD** batching.
 - MASTER Unit must have **SETUP D** enabled for Peripherals.

Service

Maintenance and Repair

Your BinTrac module contains NO USER SERVICEABLE PARTS. If, after troubleshooting, the product stops working for any reason it must be returned for repair.

To keep your BinTrac Breeder Control system functioning effectively, ensure that you periodically inspect the weighing system attached to the weigh bin. Inspect for material under the bin legs and for any binding.

Do not clean the BinTrac modules with a pressure washer. Use a washcloth soaked in warm water containing a mild detergent and disinfectant.

Troubleshooting

Flashing Fill

The error message **FILL** will flash during an unload batch if a fill event is detected. **FILL** will continue to flash up to 10-20 minutes following the fill event to allow for settling and accurate batching. Batching will automatically resume following the 10-20 minute delay.

Flashing Set.LC

SET.LC is displayed only when the unit is first turned on. This simply means that you must set/verify the L.C.CAP setting in the SETUP mode to ensure proper weighing calibration of the system. Once this is set, the message will no longer be displayed.

Load Batch Does Not Start

Loading of weigh bin is based on a gross weight target amount. If the target amount is currently below the gross weight in the bin, batch will not start.

BinTrac Breeder Control Blank

BinTrac Breeder Control(s) weight display and tank level indicators are blank/off. This can be caused by loss of power to the unit, disconnected or broken wires, or damaged equipment.

1. Reset Problem
 - a. A brown out condition can sometimes cause a problem with reset and startup of a Breeder Control. Disconnect power to the devices with a 20 second delay before reapplying the power.
2. Loss of Power
 - a. Inspect the electrical outlet for the BinTrac Power Supply. Ensure it is making a good electrical connection.
 - b. Verify the breaker or GFI for the electrical outlet is not tripped.
3. Measure Input Voltage from BinTrac Power Supply
 - a. Disconnect +12 and -12 PWR wires within BinTrac Breeder Control(s) and measure input power. Input power should read between 11.5 to 12.5 VDC. If no voltage is detected, the BinTrac Power Supply may be defective.
4. Inspect all cabling between power supply, Breeder Control(s), and Smart Summing Boxes to ensure it has not been damaged.
5. Disconnect components until the defective component is located that is shorting power.
 - a. Disconnect Smart Summing Boxes and cycle power.
 - b. Disconnect +12 and -12 PWR connects in the BinTrac Indicator and measure Smart Summing Boxes. Verify the electrical outlet the BinTrac Power Supply is plugged into is in good condition.

Inaccurate Weight Readings

Inaccurate weight readings, large fluctuations in readings, weight not changing, or error messages can be caused by obstructions and binding, incorrect user programmed settings, a problem within the Smart Summing Box, or a problem with a load cell.

1. Check for binding and/or obstructions
Slow weight shifts or not returning to zero are frequently symptoms of a binding or obstruction problem.
 - a. Check for binding of brackets and/or bin legs. Ensure there is approximately ¼” clearance between the leg and the bracket.
 - b. Check for loose bolts. Inspect bolts connecting bracket to bin leg and C-Channel to load cell.
 - c. Check for material under the bin leg. Small rocks between the bin leg and the concrete can cause inaccurate readings.

2. Check the Indicator settings
Incorrect weight readings when the system is otherwise functioning normally can be due to incorrect settings.
 - a. Confirm Rated Output – should match the average output recorded on each load cell (3.000 for HerdStar-supplied load cells)
 - b. Confirm Capacity – equals the total capacity of all load cells summed together.
 - c. Confirm Zero – bin may have been zeroed when not empty.

3. Inspect the Smart Summing Box
Small fluctuations in weight can be caused by a problem with the Smart Summing Box.
 - a. Inspect for moisture and/or foreign material.
 - b. Inspect for loose wires and connections.

4. Inspect Load Cells
Wild fluctuating weights, a weight that does not change, a negative weight reading, or **Error** on the Indicator display are common indications of a load cell problem.
 - a. Inspect load cell connections within the Smart Summing Box. A wire that is not seated properly within the load cell connector can cause inaccurate readings.
 - b. Check for cut or pinched load cell wires.
 - c. See [Load Cell Troubleshooting Procedures](#)

Error Messages

There are a few types of errors that can be encountered during operation of the BinTrac system. The following should give you some insight into the cause of the error should one occur. Errors displayed are specific to the selected bin.



If this is displayed on the screen, the BinTrac Indicator is unable to display the current value, or the value is outside of the displayable range.

1. Verify programmed settings are correct
 - a. Verify Zero calibration is valid and in range
 - b. Verify load cell capacity (L.C.Cap) has been correctly programmed
2. Open Smart Summing Box and inspect load cell connections
 - a. Verify connector is properly aligned with its associated header
 - b. Verify wires are properly seated in each connector
3. Check for faulty load cell (See [Load Cell Troubleshooting Procedures](#))

no bin

This means that the Smart Summing Box for the selected bin is not communicating with the BinTrac Indicator.

1. Disable bins on Indicator that do not have an associated Smart Summing Box and bin
2. Verify wiring between Indicator and Smart Summing Box
3. Inspect Smart Summing Box internal diagnostic light
 - a. Off: Smart Summing Box not receiving power
 - b. Steady flashing: normal working condition
 - c. Irregular flashing: unable to communicate.
4. Verify Smart Summing Box has been programmed as the correct bin
 - a. Verify Smart Summing Box dip switch settings (see **Figure 2**)
 - b. Verify that two or more Smart Summing Boxes have not been programmed as the same bin
 - c. Check for broken wires or loose connections
5. Check for faulty load cell (See [Load Cell Troubleshooting Procedures](#))

BIN	S1	S2	S3	S4
A	OFF	OFF	OFF	OFF
B	ON	OFF	OFF	OFF
C	OFF	ON	OFF	OFF
D	ON	ON	OFF	OFF

Figure 2

oLORd

This means that the weight in the bin has exceeded the programmed system capacity by 150% and the system is in an over-load state.

1. Verify programmed settings are correct
2. Check for physical binding of brackets/hardware
4. Remove the weight from the system and check the condition of each load cell (See [Load Cell Troubleshooting Procedures](#))

no con

This means that the Remote Display has lost communications with the host BinTrac Indicator.

1. Verify unit was intended for use as a Remote Display and not programmed incorrectly
 - a. Bin A LED should be solid in setup menu if unit is intended to be configured as remote display. If unit is NOT intended to be a remote display, Bin A LED should be blinking in setup menu (see [Page 7](#)).
2. Check for broken wires or loose connections
3. Verify wiring is correct between Indicator and Remote Display

noPUL

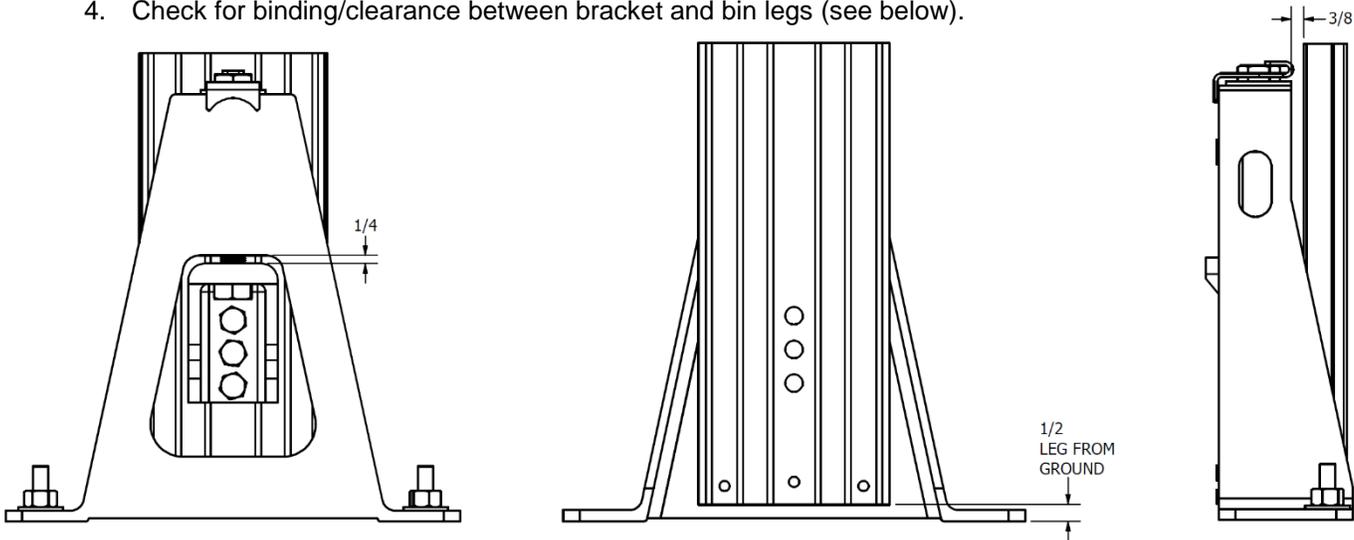
This error message indicates that the BinTrac Indicator has been programmed for a pulse output and is unable to communicate with the HouseLink WP.

1. Verify HouseLink WP dip switch settings (See HouseLink manual)
2. Check for broken wires or loose connection

Load Cell Troubleshooting Procedures

The procedures below outline the steps for identifying and locating a defective load cell. Procedure 1 is most commonly used and quickest, although Procedure 2 can be used for better analysis and for determining even loading across all load cells.

1. Check for cut load cell cables.
2. Check connections in Smart Summing box.
3. Check for debris under bin legs.
4. Check for binding/clearance between bracket and bin legs (see below).



Quick Load Cell Inspection Procedure

1. Record/Note Current Weight Reading on BinTrac Indicator.
2. Disconnect a single load cell from Smart Summing Box.
3. Observe for change in weight display. If weight change is significant and/or more stable, note this load cell as possible defect.
4. Reconnect load cell if symptoms did not change.
5. Repeat for remaining load cells.
6. Replace load cell that when disconnected provides the most accurate reading or proceed to Comprehensive Load Cell Inspection Procedure.

Comprehensive Load Cell Inspection Procedure

1. Record/Note Current Weight Reading on BinTrac Indicator.
2. Disconnect all but one load cell within summing box.
3. Record weight reading.
4. Disconnect load cell and connect next load cell and repeat for all remaining load cells.
5. Review weight readings.
6. Variations in readings can be caused by offset loading within bin and/or improper lifting screw tension.
 - a. Inspect loading within bin matches load cell reading variations.
 - b. Examine bracket assembly and lifting screw tension.
 - i. If reading is low and others beside it are high, tighten screw slightly.
 - ii. If reading is high and others beside it are low, loosen screw slightly.
 - iii. If reading is out of range, replace load cell.
 - iv. Repeat individual readings inspection and adjustments return to Step 2.
7. Reconnect all load cells except for known defective one.
8. Repeat procedure if weight reading is not accurate.

Note: If a defective load cell is located, by unplugging it, the scale system will continue to function until time is available to replace the defective load cell.

HerdStar BinTrac® Warranty

HerdStar, LLC (“**HerdStar**”) warrants to original purchaser (“**Buyer**”) that goods manufactured solely by HerdStar, LLC (“**Products**”) will be free from defects in material or workmanship under normal and intended use and service for a period of one year from delivery date of the Products. Used and/or refurbished parts sold shall carry a 90-day warranty on material and workmanship. All warranty claims must be submitted within ten (10) days of discovery of defects within the warranty period or shall be deemed waived. Furthermore, HerdStar, LLC warrants the load cell (“Load cell” is defined as the s-shaped component and any cabling and connectors) against lightning damage for 12 months or the term of any extended warranty.

In the event of a defect in any Products constituting a breach of the warranty provided herein, HerdStar, LLC will at its option either (i) repair or replace such Product free of charge, or (ii) in lieu of repair or replacement, refund to Buyer the original purchase price less the reasonable value of Buyer’s use of the Products. HerdStar, LLC shall furnish to Buyer instructions for the disposition of the defective goods. HerdStar, LLC shall have the option of requiring the return of the defective goods, transportation prepaid, and proof that the goods were not used, installed or altered or subject to misuse or abuse to establish the claim. No goods shall be returned to HerdStar, LLC without its prior consent. The acceptance of any goods returned to HerdStar, LLC shall not be deemed an admission that the goods are defective or in breach of any warranty, and if HerdStar, LLC determines that the goods are not defective they may be returned to Buyer at Buyer’s expense. This warranty sets forth Buyer’s sole and exclusive remedies for any defect in the goods. The rights and obligation under this warranty may not be assigned or delegated to a third party by Buyer without the prior written permission of HerdStar, LLC. Neither Buyer nor any other person may modify or expand the warranty provided herein, waive any of the limitations, or make any different or additional warranties with respect to the Products. Any statements to the contrary are hereby rendered null and void unless expressly agreed to in writing by an authorized officer of HerdStar, LLC.

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