H-BTB200 Hopper Batching Control Installation and Operation Manual

Software Ver 3.31.76

Patented
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U.S. Patent No. 9,310,243, Patent No. 9,651,413, Patent No. 10,082,421
Canada Patent No. 2,822,294
Korea Patent No. 1900521

Table of Contents

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

Overview

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

Components

A BinTrac Hopper Batching Control system consists of a few basic components:

BinTrac Hopper Batching Control

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

S Style Load Cells

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

Smart Summing Box

A single Smart Summing Box per hopper communicates the current reading on the leg brackets to the BinTrac Hopper Batching Control.

BinTrac Power Supply

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

BinTrac Relay and Toggle Switch Kit

An external relay switches high voltage lines that control a conveyor/auger. The toggle switch provides auto/manual override of the conveyor.

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 Hopper Batching Control.

Features

Weight Display

The BinTrac Hopper Batching Control displays the gross weight of the hopper and its level.

Batch Run

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

Fill, Usage, and Batch Log

The BinTrac Hopper Batching Control records the net weight increase of the last four fill events, the current day's and last four 24-hour usage amounts, and the last ten batch amounts.

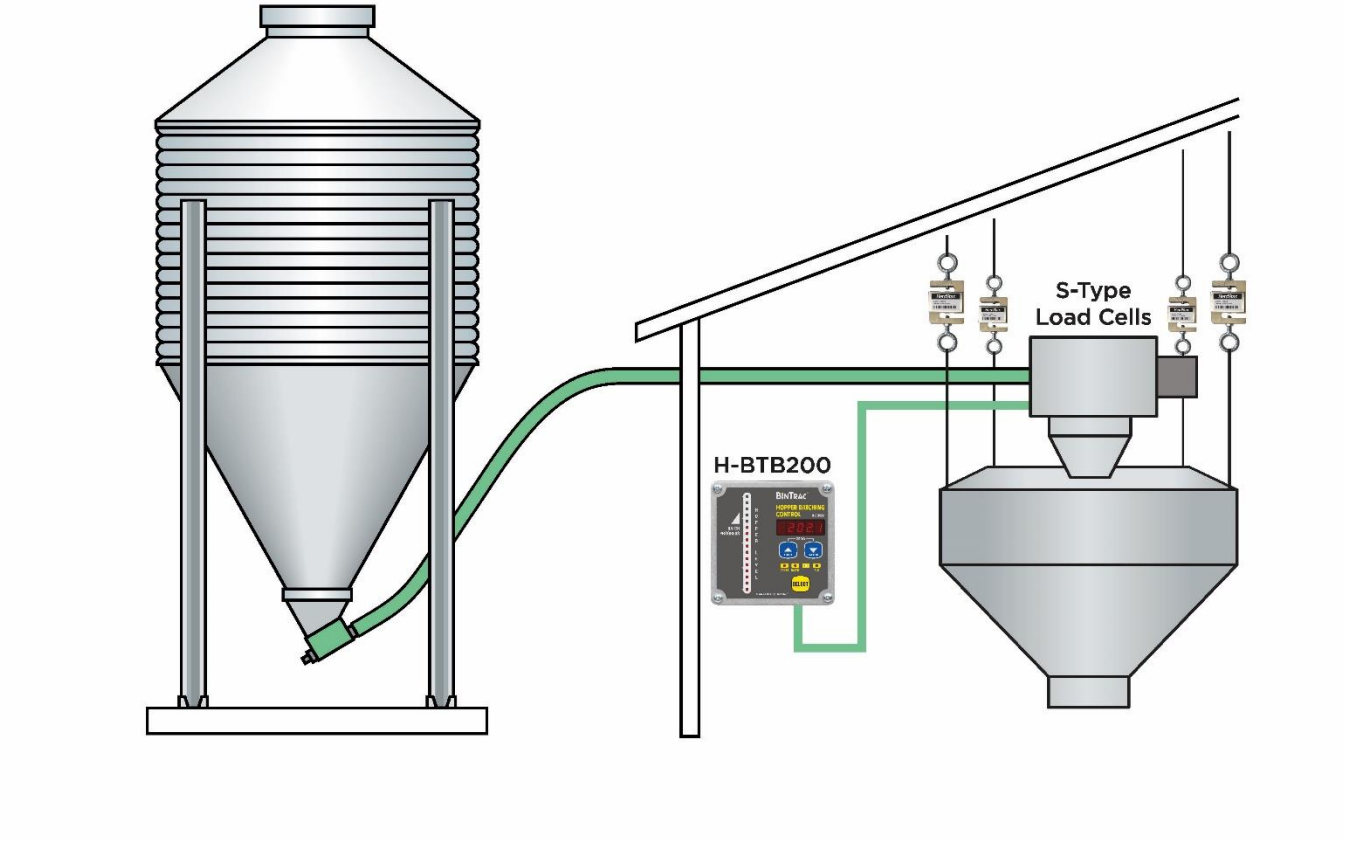
Remote Display

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

About This Manual

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

- **Installation** – This section covers the installation of the Hopper Batching Control, Smart Summing Box, and load cells.
- **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 the BinTrac Hopper Batching Control. Refer to **Configurations** below to determine which configuration is appropriate for your scenario.



Installation

1. Start by supporting the hopper that will eventually be supported by the four 250/500 lb load cells in its appropriate position. Note: Some systems may only have two 500 lb load cells.
2. Mount cables/chains to the ceiling at points that are directly above the support points of the loadcells. **DO NOT CONNECT THROUGH MULTIPLE PULLEY SYSTEMS AS THE WEIGHT BEING SUPPORTED BY THE LOAD CELLS MUST BE 1:1.**
3. Now, connect the other end of the cable/chains to the TOP eyebolt of the 250/500 lb load cells.
4. Next, fasten the bottom eyebolt on the S-cells to the frame in the corners of the hopper scale. S-hooks (not supplied) work well for this connection.
5. Remove the support under the hopper system so that it is now being directly supported by all of the load cells.
6. Check the support cables/chains for straightness in all directions. These must hang straight to maintain scale accuracy. Also, check to ensure that all cables are supporting the hopper equally and that the cables are under tension and not loose due to only being supported by 2-3 load cells.
7. Check to ensure the hopper is level on all sides (**Figure 1**). If level adjustment is needed, simply loosen/tighten up the eye bolts slightly on top of the load cell. Make sure not to tighten the eyebolt too much so that it goes through the entire top portion of the s-cell and bottoms out in the middle section (circled in **Figure 2**). This will cause the s-cell to weigh inaccurately.

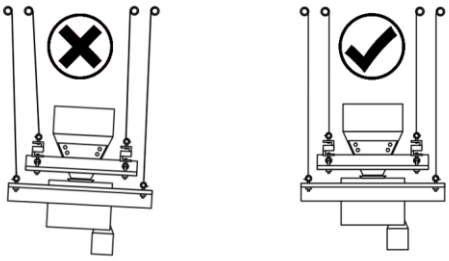


Figure 1

Figure 2

Wiring

Wiring the Smart Summing Box

In order to get a reading from the load cells, you need to tie them together into a Smart Summing Box. One Smart Summing Box per hopper is required.

1. Mount the Smart Summing Box (SSB) near the hopper where it is easily accessible for maintenance.
2. Run the cable from each load cell to the Smart Summing Box.
3. Before plugging the cables in, remove the black plastic lock nut from each cable strain relief. Remove the red plug from each predrilled hole. Pass the cable through the box and then the nut. Be sure to have a drip loop outside the SSB.
4. Plug in the load cells starting in the upper left until all load cells are plugged in.
5. Pass the communication cable through the gray liquid tight strain relief on the right side of the enclosure.
6. Using an appropriately sized wire nut, connect the wires according to the chart in **Figure 3**.
7. Attach the GREEN/YELLOW ground wire via one of the screws used to attach the SSB.
8. Run the communication wire to the BinTrac Hopper Batching Control.

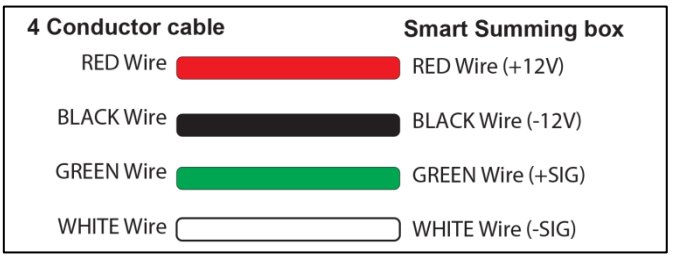
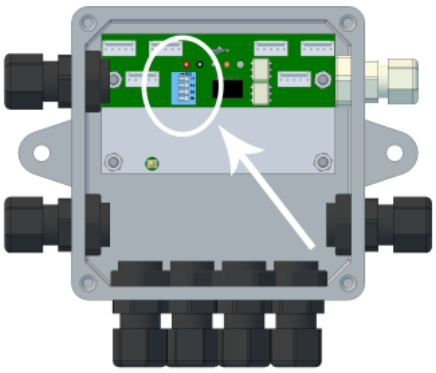


Figure 3: Connect wires following the above chart.

9. Tighten every strain-relief (“dome nut”) on the box. First, tighten the nuts to attach the strain reliefs to the box. Then, tighten the dome nut until the cable cannot be pulled out of the box.
10. Set the Smart Summing Box to ‘A’ using the dip switches inside the summing box. (**Figure 4**).



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 4: Set appropriate bin using dipswitch.

Wiring the BinTrac Power Supply

11. The Power Supply (PS17) is intended for inside use. If the BinTrac Hopper Batching Control is installed in an office or building walkway, the Power Supply can be installed in the same area near an outlet.
12. Mount the Power Supply in a location that allows the 12VDC cable to be run a short distance to the Hopper Batching Control unit.
13. Once the cable is routed from the Power Supply to the BinTrac Hopper Batching Control and has been tied up out of the way, cut off any excess cable and connect into Batching Control unit as shown below.

Wiring the BinTrac Hopper Batching Control

14. Locate the terminal block in the BinTrac Hopper Batching Control labeled ‘BINS’.
15. Insert the wires into the terminal block where RED is +12V, GREEN is +SIG, WHITE is –SIG and BLACK is - 12V. (**Figure 5**)
16. Connect the wires from the BinTrac power supply to the terminal block labeled ‘PWR’ where WHITE is +12V and BLACK is -12V.
17. After wiring the Smart Summing Box to the BinTrac Batching Control Indicator, you will then wire the Auger Relay to the BinTrac Hopper Batching Control Indicator as shown in the addendums. A voltage suppressor is provided with the Relay Kit (KIT-000028) and is to be connected across the Auger Relay coil. In addition, an auto/manual override switch is included in the kit and should be installed as well.

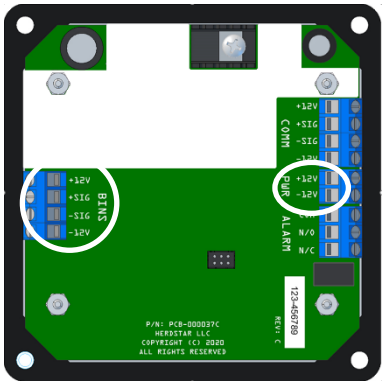


Figure 5: Insert wires in appropriate terminal blocks.

System Settings

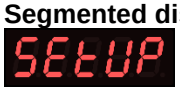
The SETUP mode is used to configure the different settings and parameters of the BinTrac Hopper Batching Control. This section of the manual will explain each option available in the SETUP menu and how to adjust them. **For step by step directions on programming and operating your BinTrac Hopper Batching Control, see Page 10.**

Note: If there is no activity for 25 seconds 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 until SETUP is displayed, then release.

   Segmented display:

Navigating Setup mode

To navigate through the options in SETUP mode, use the ▲ or ▼ 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 ▲ or ▼ keys. Press the SELECT key when you reach the desired option.

****Note: When editing parameters in the setup menu, pressing and holding the ▲ or ▼ keys will increase the speed at which the value changes.**

SETUP Menu Flow Chart

Options in Setup Mode

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

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

Batch Type

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 access setting.
2. Use the ▲ or ▼ keys to select LoAd or u.LoAd.

Segmented display:

Load Cell Capacity Value

Sets the total capacity of the system in pounds or kilograms. The total capacity is the sum of all the load cells rated capacity. This can be calculated by multiplying the capacity of the individual load cells by the total number of load cells.

Example: *A hopper using two 250lb load cells would result in an L.C.CAP setting of 500.*

Note: When setting up for kilograms, convert the total capacity to kilograms (1 pound = 0.453592 kilograms). Using the example above, the capacity in kilograms would be 22.67.

1. Press the SELECT key to access setting.
2. Use the UPPER ▲ key to increase the value.
3. Use the LOWER ▼ key to decrease the value.

Segmented Display:

Increment Value

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

1. Press the SELECT key to access setting.
2. Use the UPPER ▲ key to increase the increment value.
3. Use the LOWER ▼ key to decrease the increment value.

Segmented display:

Full Value

Sets the weight of a full hopper in pounds or kilograms. 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 SELECT key to access setting.
2. Use the UPPER key to increase the value.
3. Use the LOWER key to decrease the value.

Segmented display:

Zero Value

Sets the weight of the empty hopper. This value can also be set in the Operation Settings (see **Startup**, step 4). 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 hopper weighs200 lbs. empty. By setting the zero value to 200, the BinTrac Hopper Batching Control calculates the material weight as the total weight less the zero-weight value.*

Note: If the bin was zeroed on the Hopper Batching Control by pressing and holding the UPPER and LOWER keys (see **Page 13** – Startup **step 4**), this field will display the automatically calculated amount.

1. Press the SELECT key to access setting.
2. Use the UPPER key to increase the value.
3. Use the LOWER key to decrease the value.

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 when connected to a Communication Hub**.

1. Press the SELECT key to access setting.
2. Use the UPPER ▲ key to increase the value by 1.
3. Use the LOWER ▼ key to decrease the value by 1.

Segmented display:

Preact
This setting allows you to manually fine-tune the cutoff point of material flow, adjusting accordingly for the amount of free fall material that may drop into the hopper after the H-BTB200 Batching Control issues the stop command. This improves batching accuracy by preventing over-dispensing. Example: If the target weight is 100lbs but you see that an extra 2lbs flows after stopping the batch, the preact should be set to -2 to allow the overshoot to bring the batch to 100lbs. **NOTE: If A.PrE is set to on (default), the system will automatically adjust this value.**

1. Press the SELECT key to access setting.
2. Use the UPPER ▲ key to increase the value by .1.
3. Use the LOWER ▼ key to decrease the value by .1.

Segmented display:

Auto Preact
When auto preact is set to **on** (default), the system optimizes the preact value after each batch to ensure the best accuracy of the batch. If set to **off**, batching relies on the static preact value (above) that is entered by the user.

1. Press the SELECT key to access setting.
2. Use the ▲ or ▼ keys to set this feature to on (default) or off.

Segmented display:

Software Version
Displays the Hopper Batching Control programmed software version number.

1. Press the SELECT 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 the connected Smart Summing Boxes. This number may be required if technical help is needed. For example, a no.b in message on a remote BinTrac Control.

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

Segmented display:

End

Allows the user to exit SETUP mode.

1. Press the SELECT button to exit SETUP mode.

Segmented display:

Initial Setup and Operation

Follow the system wiring diagram (**Page 16**) to aid in the installation process, including supplied relays and switches. Once installation is completed, the BinTrac Hopper Batching Control unit must be programmed as summarized below:

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 TYPE (b.tyPE)
- 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 25 seconds 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 ▲ or ▼ 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, then release.

   Segmented display:

2. b.tyPE will be displayed.

Batch Type

Enables you to set the batch option to **LoAd** or **u.LoAd** (unload depending on your configuration.

Segmented display:

SETUP Menu Flow Chart

3. Press the SELECT key to enter BATCH TYPE menu and u.LoAd (unload) should be displayed. Use the ▲ key to select between LoAd (for batching **into** a hopper) or u.LoAd (for batching **out of** a hopper).
4. Press the SELECT key once and L.C.CAP will be shown. If not (earlier software versions), tap the ▼ key until L.C.CAP is shown.

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 2 load cell hopper with 500lb load cells would require an L.C.CAP setting of 1000 pounds.

Segmented display:

5. Press the SELECT key. The display will show the current setting (default is 1000.0).
6. Use the ▲ or ▼ keys to increase or decrease the value. Hold the key down to increase/decrease quickly.
    i. Settings of 1000 pounds or less will add a decimal point for increased resolution.
7. Upon setting the appropriate value, press SELECT and the display will show incr.
8. Tap the ▼ key and FuLL is displayed.

Full Value

This value is the maximum weight of a full hopper in either pounds or kilograms and 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 material in the hopper at which point you would consider the hopper to be full.

Segmented display:

9. Press the SELECT key.
10. Use the ▲ or ▼ keys to increase or decrease the value. Hold the key down to increase/decrease quickly.
11. Upon setting the appropriate value, press SELECT and the display will show 2Ero.

Zero Value

Sets the weight of the empty hopper in either pounds or kilograms. The zero value is used to compensate for the empty weight of the hopper to give an accurate value for the net weight of the material inside. The Hopper Batching Control calculates the material weight as the total weight less the zero (empty) weight value.

Example: A hopper weighs 200 pounds empty. In standard operation mode, simply press and hold on both the ▲ and ▼ keys until 0 displays. This would then set the zero value in the SETUP mode to 200.

Segmented display:

12. 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 ▲ or ▼ keys until the desired value for an empty hopper is shown.

13. Press the SELECT key and YEAr is displayed.

14. Tap the ▼ key 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:

15. Press the SELECT key and the current hour is displayed. Use the ▲ or ▼ keys to enter the proper hour in 24-hour format.

16. Once the proper value is displayed, press SELECT and nn in is displayed.

17. Tap the ▼ key until End is displayed.

End

Allows the user to exit SETUP mode.

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

Segmented display:

Startup

1. Inspect the BinTrac system installation and verify that the hopper is level and cables are not angled.
2. Place a known weight in hopper to ensure weight is accurate. Remove weight.
3. Zero hopper:
    a. **Ensure hopper is empty and in the Gross Weight Display mode on the Batching Console.** Hold on both the ▲ and ▼ keys until the display shows 0.
    b. Record Zero _____ (empty weight of hopper) by viewing in SETUP Menu - see page 8 (Used for resetting the zero point of the scale if it is ever zeroed out with weight in the hopper in the future).
4. Switch the Auto/OFF/On toggle switch to Auto.

Note: If using in unload mode, the filling of the hopper must be completed at least 15 minutes prior to starting the batching process. If done sooner, the system will display 'Fill' showing unit is still processing the fill event and will not allow the unload process to start until this is completed. To override, press the ▼ key once and FILL will display. Press the Select key to override and begin batching.

Operation

Press the SELECT key to alternate between Gross Weight and Batch Amount. The Gross Weight is the total material in the hopper. The bar graph indicates the approximate level in the hopper. The Batch Amount will cycle through the date, time, target amount and actual batch amount of the last run batch. 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. Tap the ▼ (BATCH) key until bAtch is displayed.
2. Press SELECT to view the Batch Target Weight value.
    a. Unload Mode – set this value to the amount/weight of material you want to batch out of the hopper.
    b. Load Mode – set this value to the gross target weight of the hopper you are filling. For example, if the hopper currently has 50 pounds in it and you want to add 50 more, this value would be set to 100.
3. Use the ▲ and ▼ keys to increase or decrease the value.
4. Press SELECT and run will be displayed.
    a. To cancel the batch at this point, press the ▼ key and StoP will be displayed. Press SELECT to cancel the batch.
5. Press SELECT to start batching and the batch run will begin immediately, indicated by the **RUN LED** showing solid on.
6. To stop a manual batch run, tap the ▼ key until StoP is displayed. Press the SELECT key once to stop and again on the batch amount. The Indicator will then return to the Gross Weight Mode.

Scheduled Batch Run

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

NOTE: By default, if the scheduled batch is not completed in the 24 hour cycle before the next scheduled batch, the batch will reset to the original scheduled amount. This can be changed so that if the batch is not completed in the 24 hour cycle, it will run the remainder of the original scheduled amount and will reset to the full amount for the *next* scheduled batch. Please contact HerdStar support to configure this feature.

1. Tap the ▼ (BATCH) key until SchdL is displayed.
2. Press SELECT to view the hour and minute schedule.
3. Use the ▲ and ▼ keys to select hour and minute to schedule batch.
    Note: This is a 24-hour clock (i.e. 13:00 = 1:00pm).
4. Press SELECT to view the Batch Target Weight value.
5. Use the ▲ and ▼ keys to increase or decrease the value.

6. Press SELECT to display the batch run control status (run or StoP).
7. Use the ▲ or ▼ keys to enable or disable batch run control.
8. Press SELECT with run displayed. The Indicator will then display the batch amount and a countdown to 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.
9. To stop a scheduled batch run, tap the ▼ key until StoP is 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, tap the ▼ key until PAUSE is displayed. Press the 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, tap the ▼ key until run is displayed, then press the SELECT key. The batch will then continue until completed.

Display Batch Log

This procedure allows you to view the last ten batch amounts.

1. Tap the ▲ (INFO) key until b.Log is displayed.
2. Press SELECT to view the last batch amount.
    a. For each batch event, the display will cycle through the date, time, target amount and actual batch amount. For example, a batch with a target of 100 pounds that batched 103 pounds on March 22nd at 2:00pm would display as 03-22 then 14:00 then tArGt then 100 then ActL then 1003. **NOTE: A decimal preceding the batch amount indicates that batch was stopped manually prior to completion.**
3. Tap the ▼ key to view other prior recorded batch amounts. The LEDs on the Batch Progress meter will change to denote each different entry.
4. Press SELECT to return to Weight Display mode.

Display Fill Events

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

1. Press the ▲ (INFO) key until FILLS is displayed.
2. Press SELECT to view the last recorded fill event.
    a. For each fill event, the display will cycle through the date, time, and fill amount. For example, a fill of 200 pounds on January 2nd at 5:53pm would display as 01-02 then 17:53 then 200.
3. Press the ▼ key to view other prior recorded fill events. The LEDs on the Batch Progress meter will change to denote each different entry.
4. Press SELECT to return to Weight Display mode.

Display 24 Hour Usage

This procedure allows you to view the current day's usage as well as the last four 24-hour usage amounts.

1. Tap the ▲ (INFO) key until USAGE is displayed.
2. Press SELECT to view the current day's usage amount recorded from midnight.
    a. For each 24-hour period, the display will alternate between the date and the usage amount. For example, a usage of 180 pounds for January 2nd would display as 01-02 then 180.
3. Press ▼ key to view other prior recorded usage amounts. The LEDs on the Batch Progress meter will change to denote each different entry.

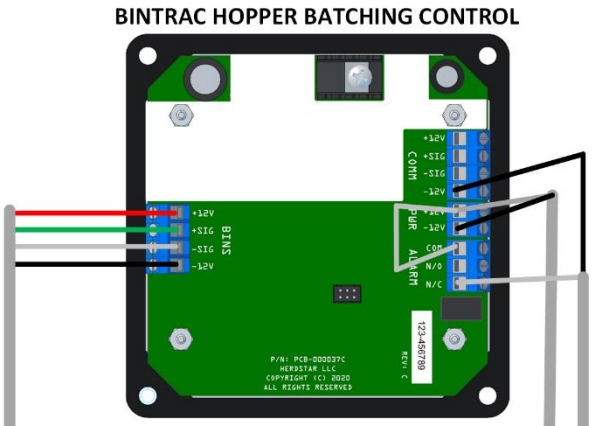
4. Press SELECT to return to Weight Display mode.

Display Batch Net Amount

This procedure allows you to view how much over/under the previous batch was. *Note – this value will only be correct until the weight of the bin changes again, so it is recommended to only view this immediately following a batch.

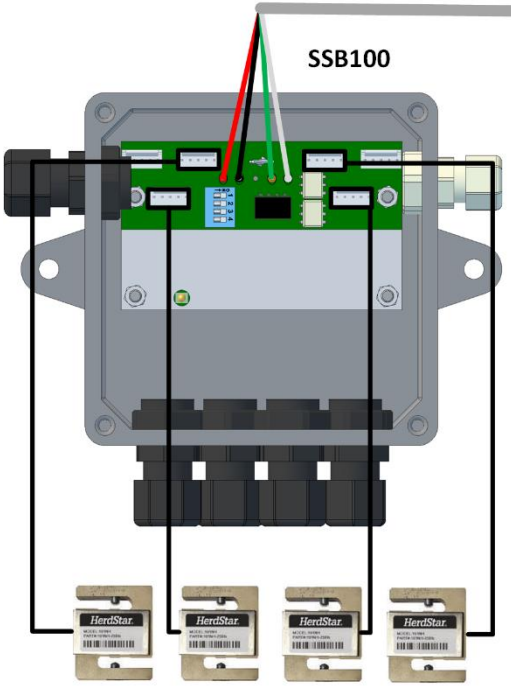
1. Tap the (INFO) key until b. nEt is displayed.
2. Press SELECT to view the previous batch net amount.
3. Press SELECT to return to Weight Display mode.

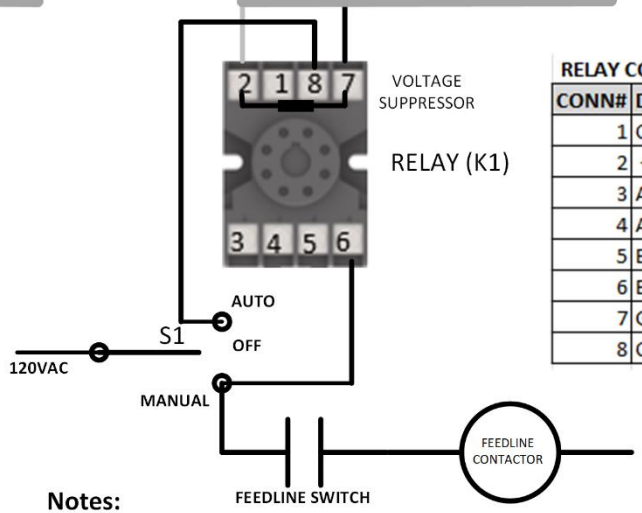
BinTrac Hopper Batching Control



WHITE +12
BLACK -12

115/230VAC





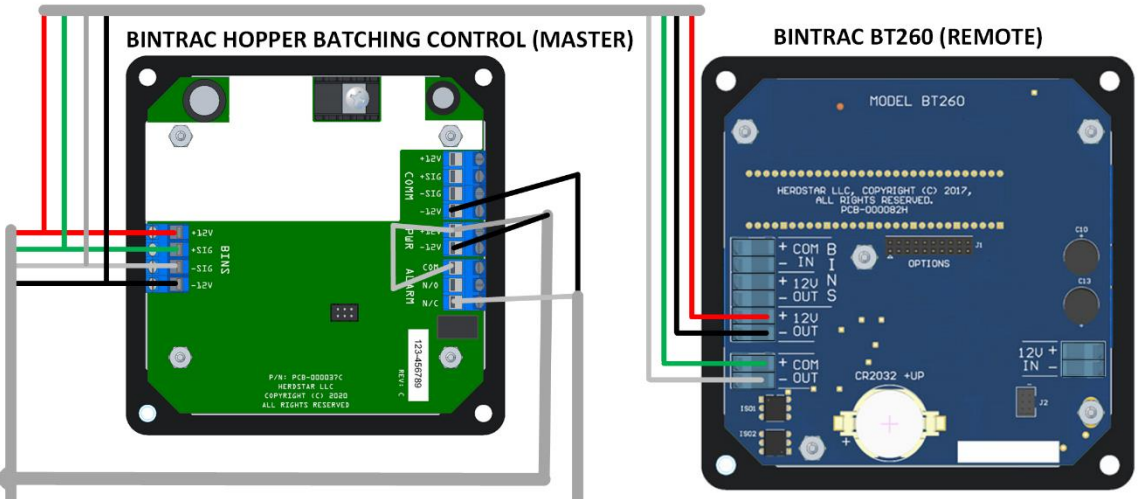
RELAY CONNECTIONS

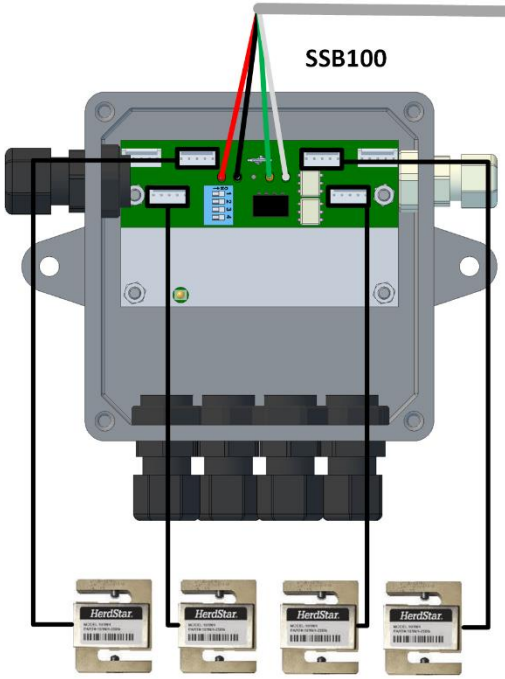
CONN#	DESCRIPTION
1	COM A
2	+12V COIL
3	A (N.O.)
4	A (N.C.)
5	B (N.C.)
6	B (N.O.)
7	GND(COIL)
8	COM B

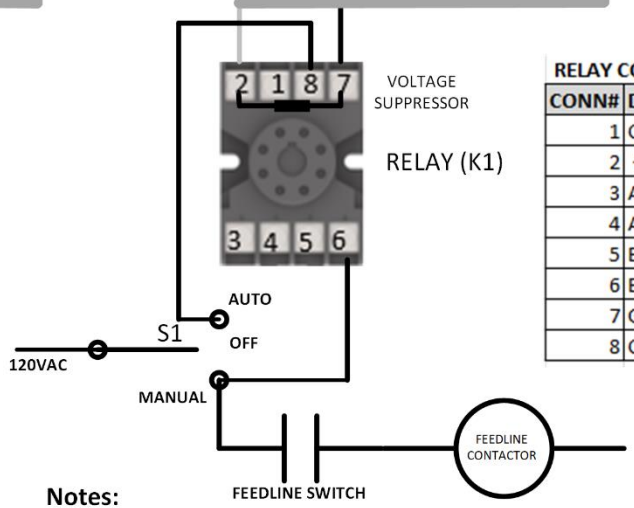
Notes:

1. Use supplied Relay/Switch kit (KIT-000028) for K1 relay and S1 switches.
2. Batching 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.
   - Batching Control must be configured for **LOAD** or **UNLOAD** batching.
   - MASTER Unit must have SETUP D enabled for Peripherals.

BinTrac Hopper Batching Control with Optional BT260 Remote







RELAY CONNECTIONS	
CONN#	DESCRIPTION
1	COM A
2	+12V COIL
3	A (N.O.)
4	A (N.C.)
5	B (N.C.)
6	B (N.O.)
7	GND(COIL)
8	COM B

Notes:

1. Use supplied Relay/Switch kit (KIT-000028) for K1 relay and S1 switches.
2. Batching 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.
   - Batching Control must be configured for **LOAD** or **UNLOAD** batching.
   - MASTER Unit must have SETUP D enabled for Peripherals.

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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