

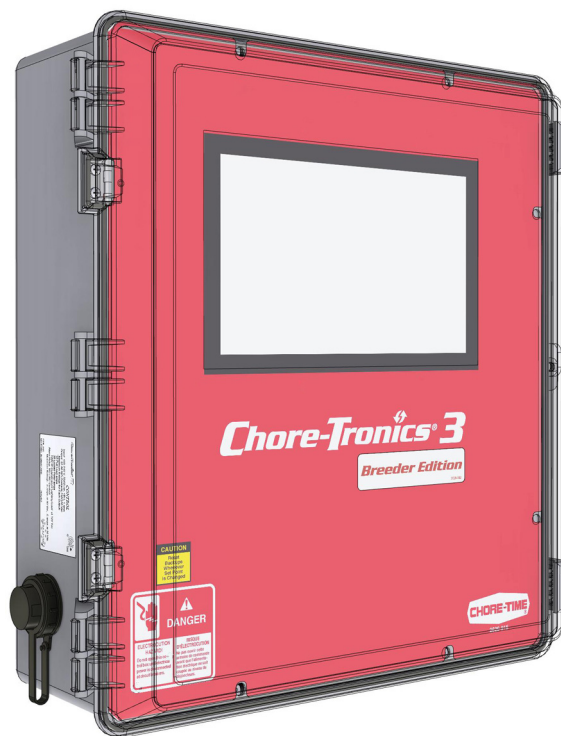


Chore-Tronics® 3

Chore-Tronics® 3 Breeder Edition Control

Installation and Operators Manual

Installation and Operators Manual



For additional parts and information, contact your nearest Chore-Time distributor or representative.
Find your nearest distributor at: www.choretime.com/contacts

Chore-Time Limited Warranty

CTB, Inc. (“Chore-Time”) warrants new CHORE-TRONICS® Controls manufactured by Chore-Time to be free from defects in material or workmanship under normal usage and conditions, for One (1) year from the date of installation by the original purchaser (“Warranty”). If such a defect is determined by Chore-Time to exist within the applicable period, Chore-Time will, at its option, (a) repair the Product or Component Part free of charge, F.O.B. the factory of manufacture or (b) replace the Product or Component Part free of charge, F.O.B. the factory of manufacture. This Warranty is not transferable, and applies only to the original purchaser of the Product.

CONDITIONS AND LIMITATIONS. THIS WARRANTY CONSTITUTES CHORE-TIME’S ENTIRE AND SOLE WARRANTY AND CHORE-TIME EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES. CHORE-TIME shall not be liable for any direct, indirect, incidental, consequential or special damages which any purchaser may suffer or claim to suffer as a result of any defect in the Product. Consequential or Special Damages as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs, and operational inefficiencies. *Some jurisdictions prohibit limitations on implied warranties and/or the exclusion or limitation of such damages, so these limitations and exclusions may not apply to you. This warranty gives the original purchaser specific legal rights. You may also have other rights based upon your specific jurisdiction.*

Compliance with federal, state and local rules which apply to the location, installation and use of the Product are the responsibility of the original purchaser, and CHORE-TIME shall not be liable for any damages which may result from non-compliance with such rules.

The following circumstances shall render this Warranty void:

- Modifications made to the Product not specifically delineated in the Product manual.
- Product not installed and/or operated in accordance with the instructions published by the CHORE-TIME.
- All components of the Product are not original equipment supplied by CHORE-TIME.
- Product was not purchased from and/or installed by a CHORE-TIME authorized distributor or certified representative.
- Product experienced malfunction or failure resulting from misuse, abuse, mismanagement, negligence, alteration, accident, or lack of proper maintenance, or from lightning strikes, electrical power surges or interruption of electricity.
- Product experienced corrosion, material deterioration and/or equipment malfunction caused by or consistent with the application of chemicals, minerals, sediments or other foreign elements.
- Product was used for any purpose other than for the care of poultry and livestock.

The Warranty may only be modified in writing by an officer of CHORE-TIME. CHORE-TIME shall have no obligation or responsibility for any representations or warranties made by or on behalf of any distributor, dealer, agent or certified representative.

Effective: **April, 2014**

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General

Support Information

This Manual is to be used in addition to the Chore-Time Chore-Tronics® 3 Control Installation Manual (MT2398) to control the Climate in a structure to insure efficient growth of Livestock. Using this equipment for any other purpose or in a way not within the operating recommendations specified in this manual will void the warranty and may cause personal injury.

Safety Information

Caution, Warning and Danger Decals have been placed on the equipment to warn of potentially dangerous situations. Care should be taken to keep this information intact and easy to read at all times. Replace missing or damaged safety decals immediately.

Using the equipment for purposes other than specified in this manual may cause personal injury and/or damage to the equipment.

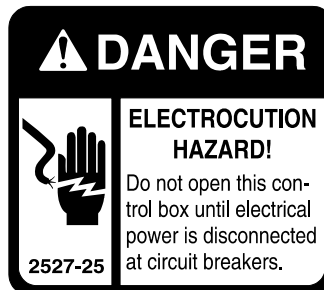
Follow Safety Instructions

Carefully read all safety messages in this manual and on your equipment safety signs. Follow recommended precautions and safe operating practices.

Keep safety signs in good condition. Replace missing or damaged safety signs.

Decal Descriptions

DANGER: Electrical Hazard



Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

Ground all electrical equipment for safety.

All electrical wiring must be done by a qualified electrician in accordance with local and national electric codes.

Ground all non-current carrying metal parts to guard against electrical shock.

With the exception of motor overload protection, electrical disconnects and over current protection are not supplied with the equipment.

Control Setup

For the Following see the standard Chore-Tronic's® 3 Manual (MT2398).

- Temperature Sensors
- Static Pressure sensor (4-20 mA)
- Relative Humidity Sensor (0-10 volts)
- Potentiometer (Natural Ventilation)

Analog Inputs

Egg Room Relative Humidity Sensor

1. In the Setup/Analog/Type & Number screen check Egg Room Humidity.
2. See "Relative Humidity Sensor (RH) Wiring" on page 36.

The screenshot shows the 'Setup / Analog Inputs / Type & Number' interface for House 1. The 'Type & Number' button is highlighted with a hand icon. The 'Egg Room Humidity' sensor is checked and set to 1. A green checkmark icon is shown below the screen.

Type	Number	Nbr of Sensors		
House Temperature	<input type="checkbox"/>	3	CO2 Sensor	<input type="checkbox"/> 0
Spare Temperature	<input type="checkbox"/>	0	Drinker Pressure	<input type="checkbox"/> 0
Outside Temperature	<input checked="" type="checkbox"/>	1	PDS Air Pressure	<input type="checkbox"/> 0
Aux Temperature	<input type="checkbox"/>	0	Drinker Temperature	<input type="checkbox"/> 0
Static Pressure	<input checked="" type="checkbox"/>	1	Egg Room Temperature	<input checked="" type="checkbox"/> 1
Relative Humidity	<input checked="" type="checkbox"/>	1	Egg Room Humidity	<input checked="" type="checkbox"/> 1
Potentiometers	<input type="checkbox"/>	0	Load Cell	<input type="checkbox"/> 1
Bird Scale	<input type="checkbox"/>	0	NH3 Sensor	<input type="checkbox"/> 0

1. Assign the Egg Room Relative Humidity Sensor to the Analog input you connected the sensor to.



The screenshot shows the 'Setup / Analog Inputs / Egg Room RH' interface for House 1. The 'Board' dropdown is set to 'IOM16 0' and the 'Input' dropdown is set to '2'. A circled '2' points to the 'Input' dropdown.

Sensor	Board	Input	Value	Corr.
1	IOM16 0	2	56	0

Egg Room Temperature Sensor

- 1. In the Setup/Analog/Type & Number screen check Egg Room Temperature.
- 2. See “Temperature Sensor Wiring” on page 36.

The image shows a navigation menu on the left with buttons for 'Setup', 'General', 'House', 'Analog Inputs', 'Outputs', 'Digital', and 'Assignments'. A hand icon points to the 'Setup' button. Below the menu is a 'Type & Number' button, also with a hand icon pointing to it. The main screen is titled 'Setup / Analog Inputs / Type & Number' for 'House 1'. It features a table with columns for 'Type', 'Number', and 'Nbr of Sensors'. The 'Egg Room Temperature' row is highlighted, and a green checkmark icon is placed to its right. The bottom status bar shows 'Admin', '27 Feb 2019', '11:08:00', 'Age', and '2 (0.2)'.

Type	Number	Nbr of Sensors
House Temperature	<input type="checkbox"/> 3	CO2 Sensor
Spare Temperature	<input type="checkbox"/> 0	Drinker Pressure
Outside Temperature	<input checked="" type="checkbox"/> 1	PDS Air Pressure
Aux Temperature	<input type="checkbox"/> 0	Drinker Temperature
Static Pressure	<input checked="" type="checkbox"/> 1	Egg Room Temperature
Relative Humidity	<input checked="" type="checkbox"/> 1	Egg Room Humidity
Potentiometers	<input type="checkbox"/> 0	Load Cell
Bird Scale	<input type="checkbox"/> 0	NH3 Sensor

Temperature Sensor Analog Input Assignment

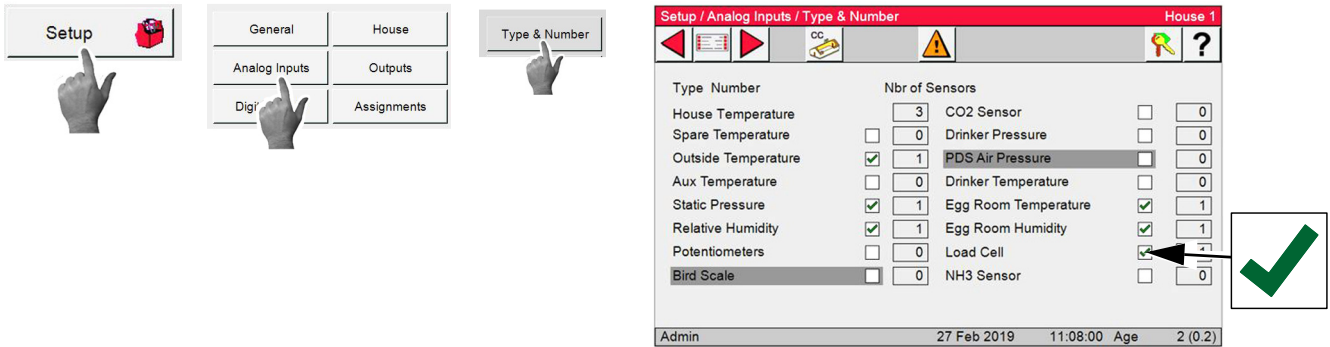
- 1. Assign the Egg Room Temperature Sensor to the Analog Input where you connected the Sensor.

The image shows a navigation menu on the left with buttons for 'General', 'House', 'Analog Inputs', 'Outputs', 'Digital', and 'Assignments'. A hand icon points to the 'Analog Inputs' button. To the right is a button labeled 'Egg Room Temperature' with a hand icon pointing to it. The main screen is titled 'Setup / Analog Inputs / Egg RoomTemperature' for 'House 1'. It features a table with columns for 'Sensor', 'Board', 'Input', 'Value', 'Corr.', and 'Backup'. The first row is highlighted, and a circled '1' with an arrow points to the 'Board' column. Below the table are 'Add' and 'Remove' buttons, and an 'Input & Calibration' button. The bottom status bar shows 'Admin', '27 Feb 2019', '10:03:47', 'Age', and '2 (0.2)'.

Sensor	Board	Input	Value	Corr.	Backup
1	IOM16 0	1	62.9	0.0	-

Feed Bin Load Cells

1. In the Setup/Analog/Type & Number screen check Load Cell.



2. In the Setup/Analog Inputs select the Load Cell button.

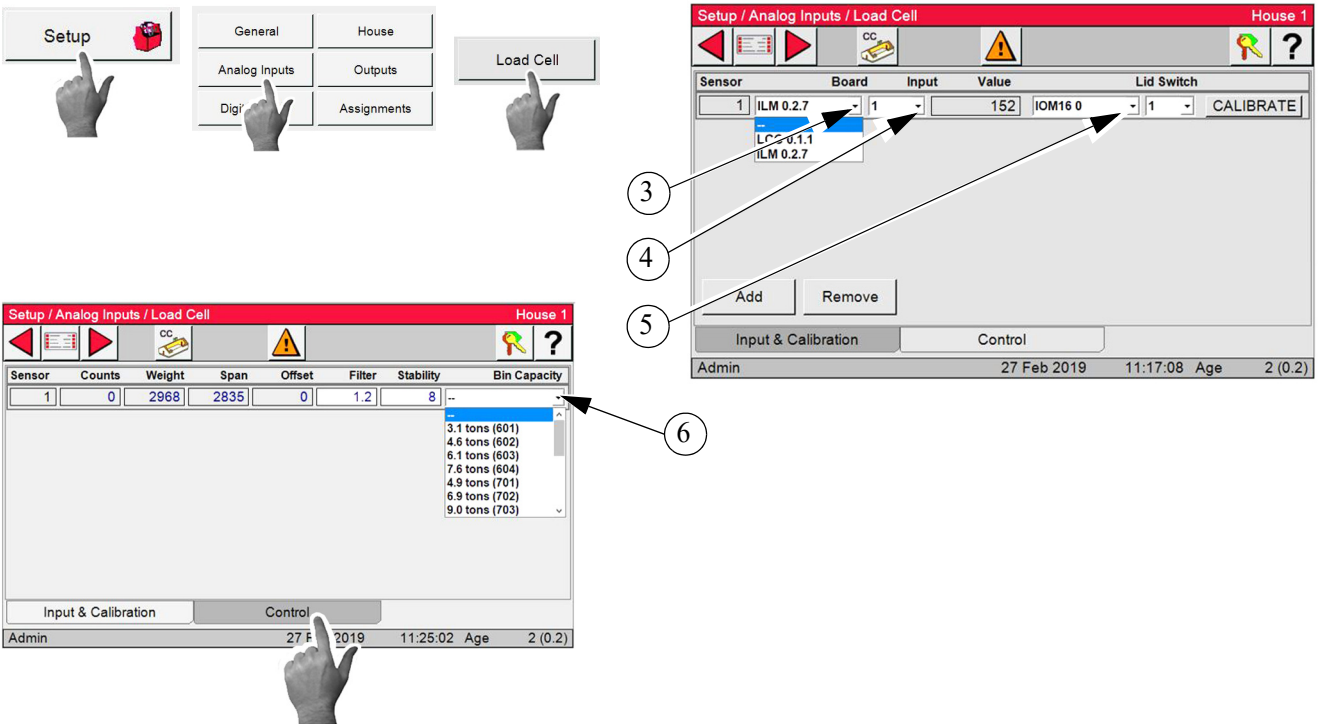
3. From the Board dropdown menu select the device being used for the Load cell input (LCC or ILM).

Note: ILM is how the SJB is identified in the CT3 Control.

4. From the Input dropdown select the Analog input where the board is connected.

5. If a Bin Lid switch is used enter the Digital in.

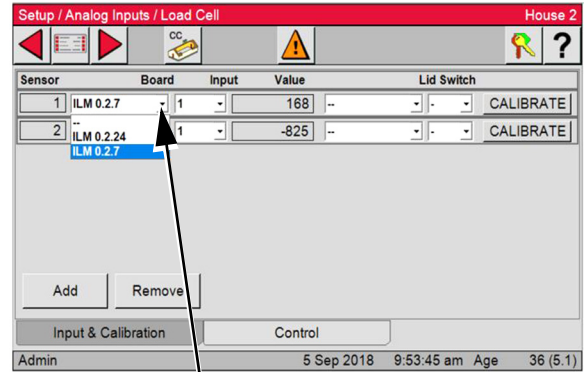
6. Select the Control Tab and select the Bin Size from the dropdown.



BinTrac to Chore-Tronics Control Calibration

For calibrating the HouseLink HL-10P/HL-10P(LV) with Chore-Tronics® 3 control, please refer to these instructions.

1. Install the load cell system per BinTrac’s Installation Manual.
2. Connect the Chore-tronics® 3 to BinTrac. See “BinTrac to Chore-Tronics Control Wiring” on page 32.
3. Setup the analog input in the CT 3. From the drop in the Board column select the device. The last number in the device name is the address that you assigned to the ILM (SJB).

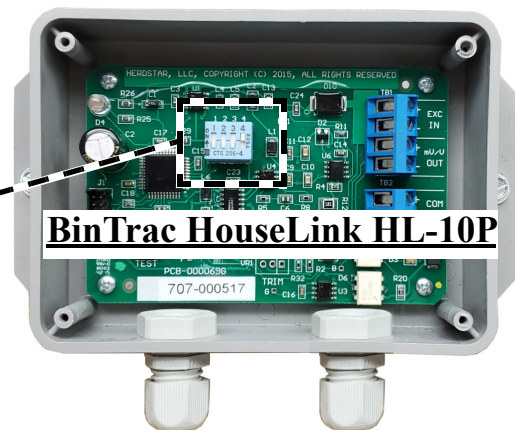


BinTrac Load Cell Calibration

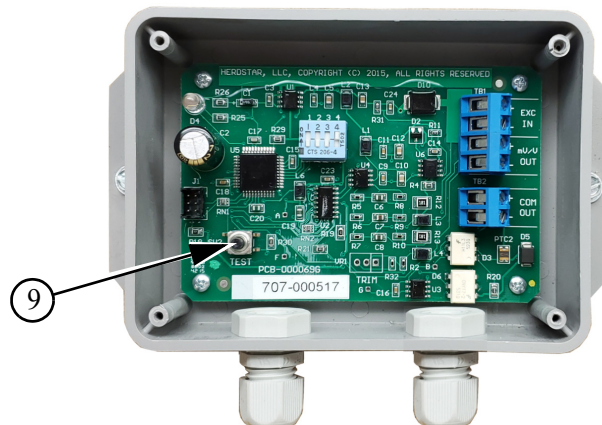
1. The BinTrac House Link HL-10P(LV) has four dip switches that need to be set up for configuration.
2. The settings on the switches S1 and S2 coincide with the bin: Set for Bin B.
3. Set S3 to the ON position to allow the ZERO to be tracked by the house controls.
4. Set S4 to the ON position to provide a 2mV/V at full scale instead.
5. Bin D must be enabled on the Bin Trac Indicator when BinTrac Monitor is connected to: BinTrac HouseLink HL-10P/HL-10P(LV).

Bin-Trac Dip Switch Settings

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



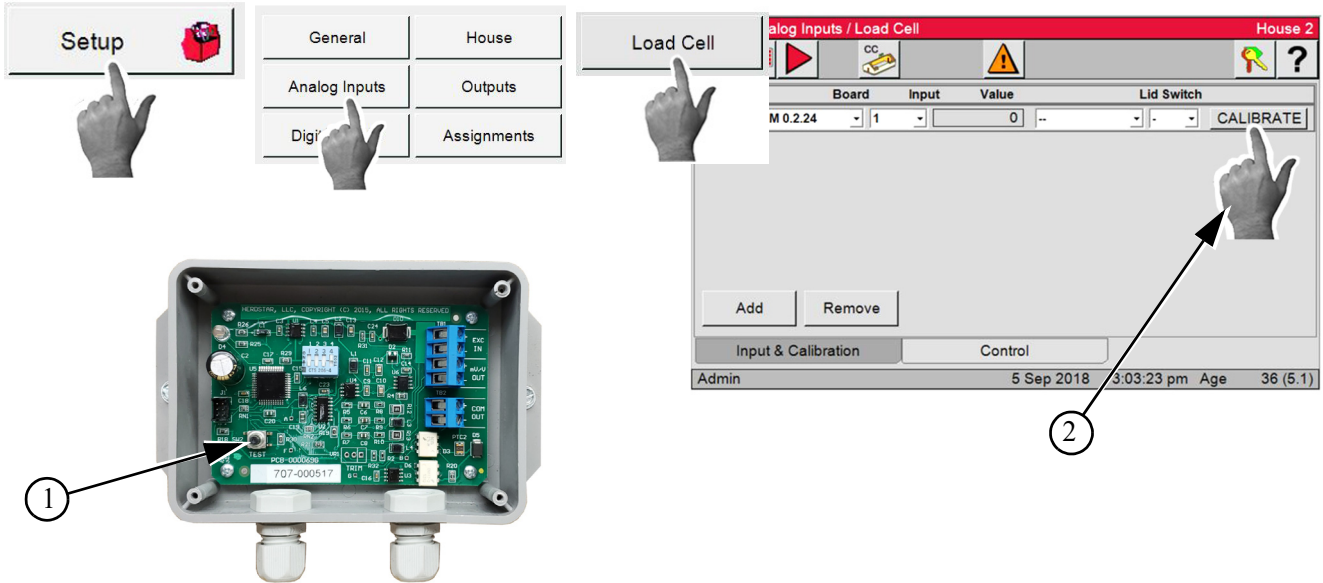
6. Refer to the BinTrac Installation and Operation Manual HouseLINK HL-10P & HL-10P(LV) on how to make these settings.
7. Once the unit is wired and the dip switches are set up correctly, you can now start the Calibration.
8. Two people are needed for this procedure. One at the BinTrac HouseLINK HL-10P & HL-10P(LV) box and one at the CT 3 control.
9. On the board of the HouseLINK HL-10P & HL-10P(LV) there is a Test button that will be used to send a Zero and Full bin calibration number.



Calibrating the Chore-Tronics Control

Calibrate the Chore-Tronic's 3 control using the calibration screens for Zero and Full weight by using the HouseLink HL-10P(LV) test mode to output an empty and full weight simulated weight reading.

1. Press the TEST button on the HouseLink HL-10P(LV) two times for the 0mV/V output setting which represents an empty bin weight reading. Zero
2. At the Chore-Tronic's 3 go to the Setup/Analog Inputs/Load Cell Screen and Select Calibrate. This will take you to the Zero Calibration screen.

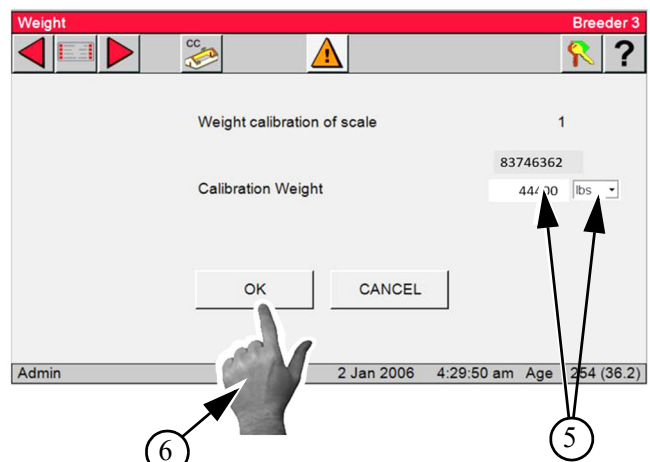
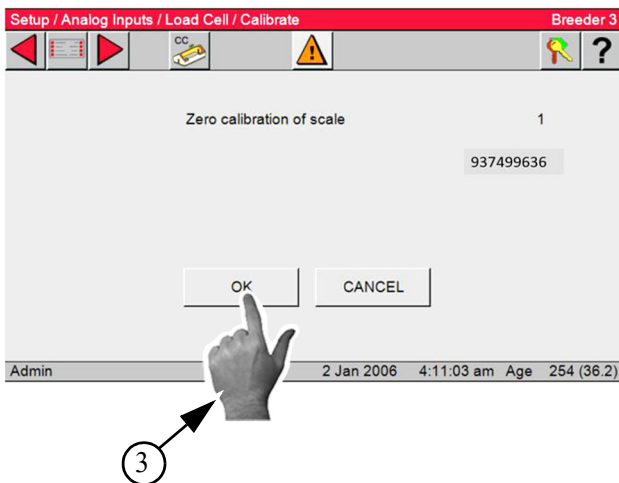


3. Make sure the calibration numbers are steady. Select OK. If the calibration is accepted the screen will change to Weight Calibration of Scale screen.
4. At the HouseLink HL-10P(LV) press the TEST button one time for the 2mV/V output setting which represents a full bin weight reading.
5. At the Chore-Tronic's 3 in the Weight Calibration Scale screen enter the capacity of the loadcells and the units from the dropdown.

For Example, if four 5000lb. load cells are used, then the calibration weight will be 20,000 lbs.

See **Figure 2. on page 39** for Calibration weight. Make sure the calibration numbers are steady.

6. Press OK.
7. Press TEST button on Houselink HL-10P(LV) **three** more times return to normal operation.

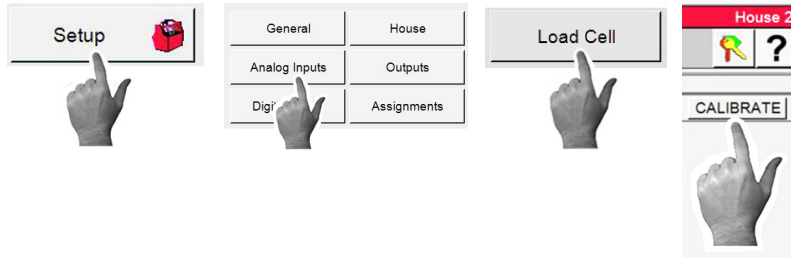


Chore-Time Load Cells

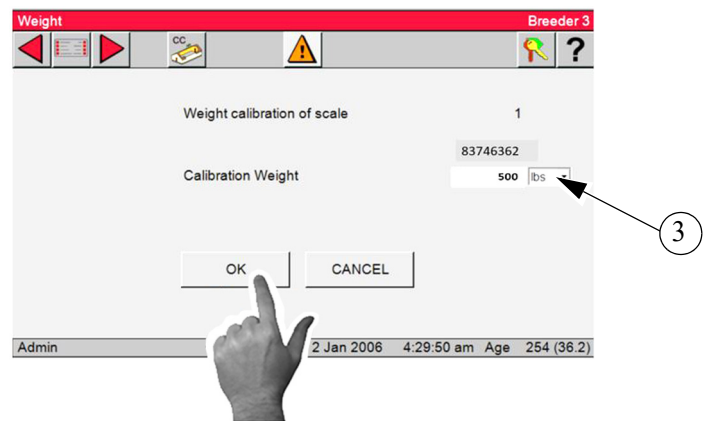
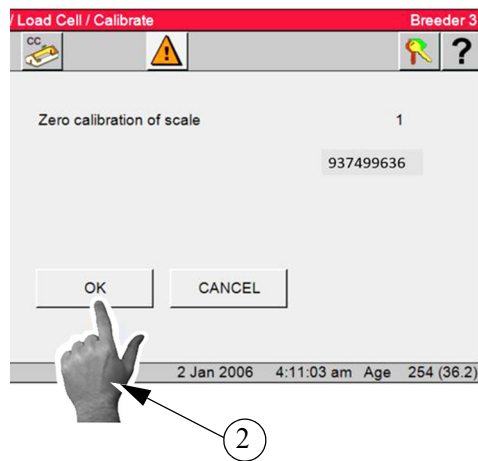
1. Install the load cell system per the Load Cell installation manual.
2. Connect the CT 3 IO terminals to the SJB IO net terminals.

Calibration

1. Go to the Setup/Analog Inputs/Load Cell Screen and Select Calibrate.



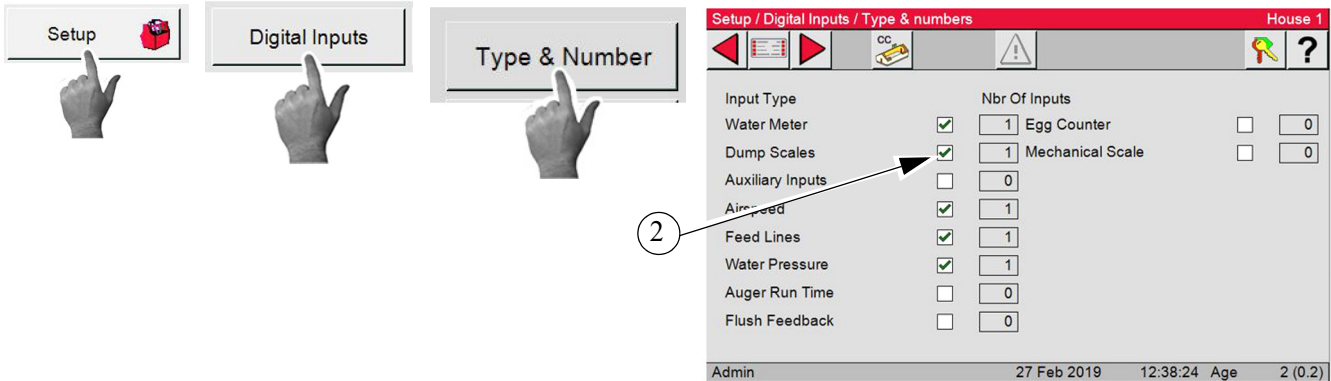
2. With no feed in the Bin select the OK Button. If there is no error then continue.
3. At the Chore-Tronic's 3 in the Weight Calibration Scale screen enter the known weight in the Bin and the units wanted from the dropdown. Example shows 500 lb.



Digital Inputs

Feed Scale Wiring (Dump Scale)

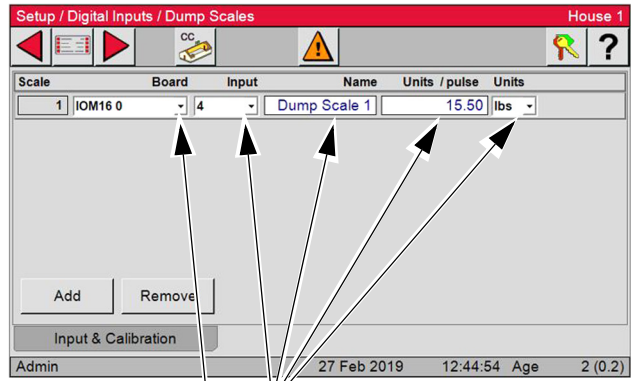
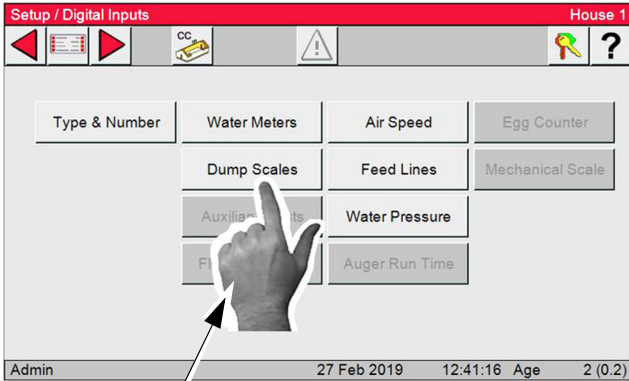
1. In the Setup/digital Inputs/Type & numbers put a check in the Dump Scales box.



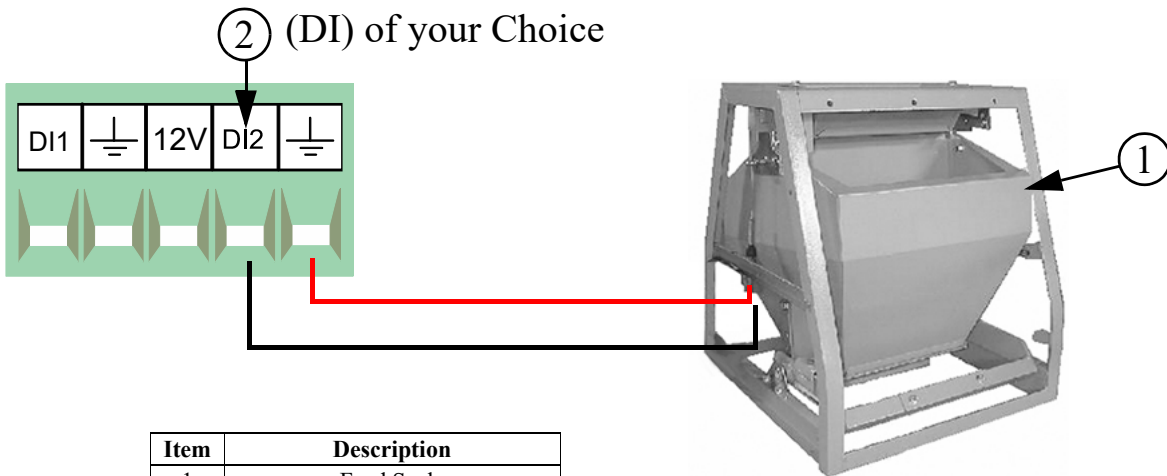
2. Use the Back arrow to go back to the Setup/Digital Inputs Screen and Select the Dump Scales button.

3. Enter the Digital Input that the dump scale switch is connected.

4. Enter the Board #, Input #, Name the Scale, Units per pulse and Units.



5. If one or more Feed Scales are used, they need to be connected to one of the Digital (DI) Inputs on the IO board using Twisted Pair Wire. Connect the switch located on the side of the Feed Scale to the IO Board using the blue and brown wires (See **Figure 1.**) See manual MT1811 for more information on the Dump Scale.

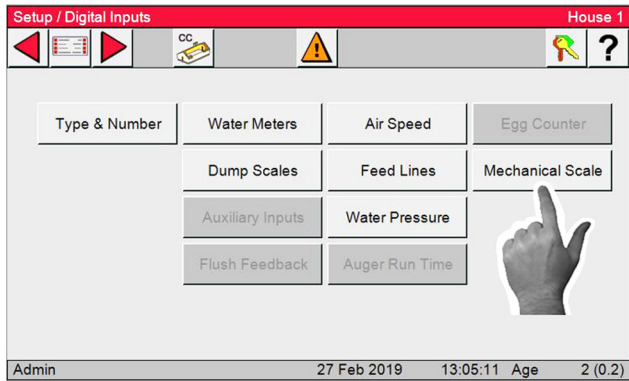
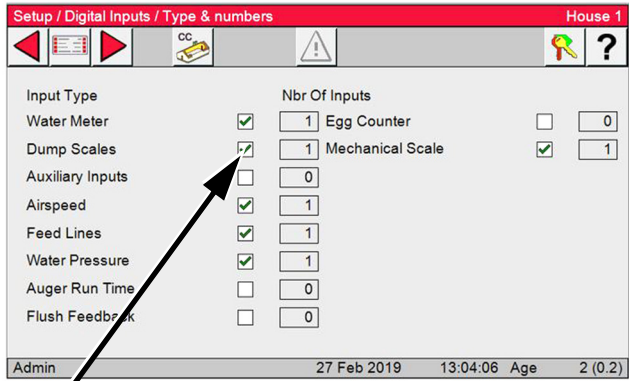


Item	Description
1	Feed Scale
2	I/O Board Digital Input (DI) terminal of your Choice

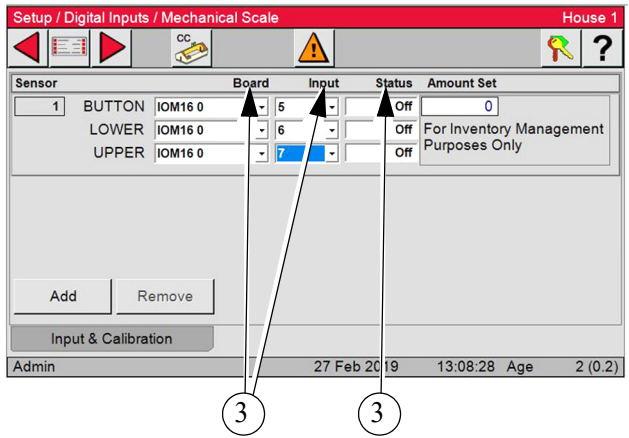
Figure 1.Feed Scale Wiring

Mechanical Scale

1. In the Setup/Digital Inputs/Type & numbers Screen put a Check mark in the Mechanical Scale box.
2. Select the Mechanical Scale button.



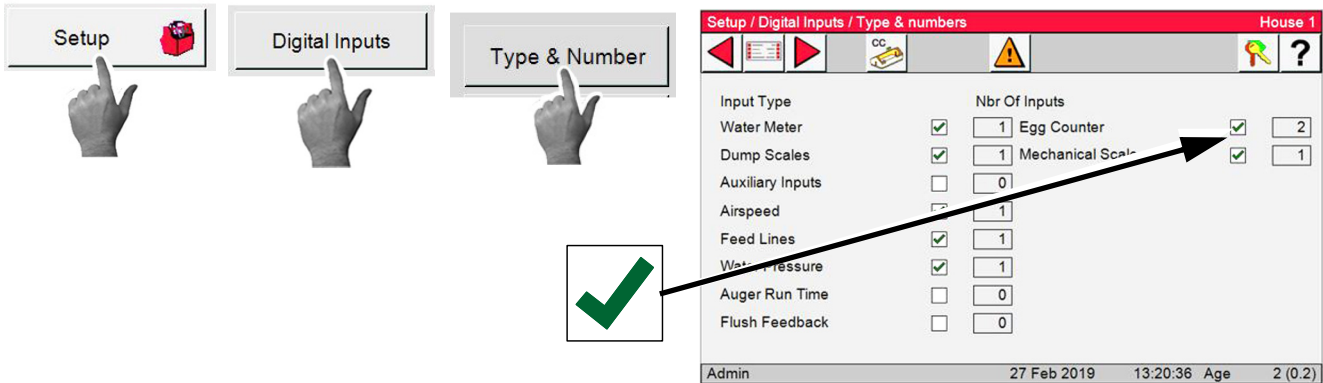
3. From the drop-downs select the Board and Input.
4. The Status column shows if the switch is activated or not.



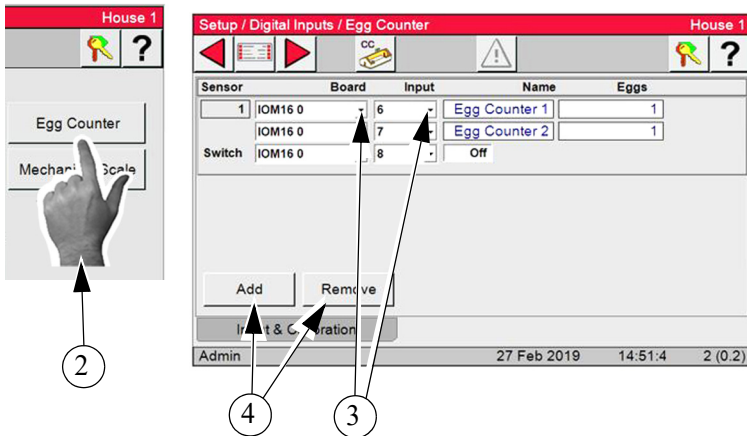
5. See Wiring Chore-Tronics Control and Weigh-matic Scale for wiring information.

Egg Counters

1. In the Setup/Digital Inputs/Type & numbers Screen put a Check mark in the Egg Counter box.



2. Back up one Screen to the Setup/Digital Inputs Screen and select the Egg Counter Button.
3. From the drop-downs select the Board and Input.
4. You can Add or Remove Counters.



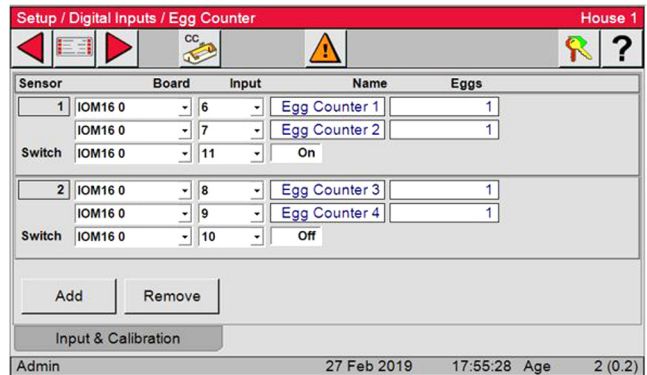
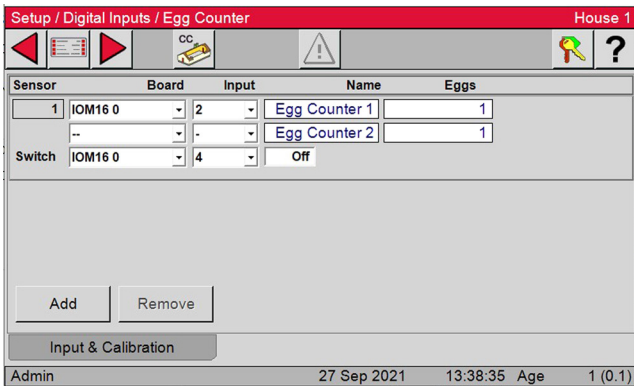
5. Up to five sets of Counters can be added. Each Set consists of two Counters and one Switch.

"Switch" is used to kept track of Run Times and to tell the CT 3 to start counting egg when the belts start.

Examples:

Example: House with Single Belt Collectors
(One Set of Counters)

Example: House with Two Double Belt Collectors
(Two Set of Counters)



Outputs

In the CT 3 Breeder control the Setup/Outputs/Equipped & Numbers screen has been separated with four tabs.

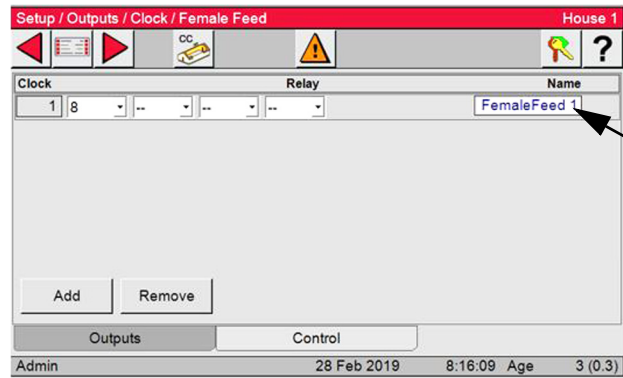
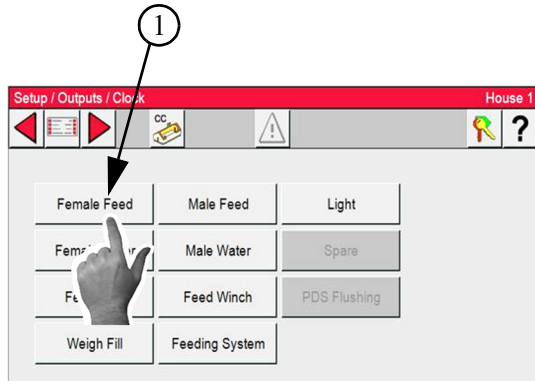
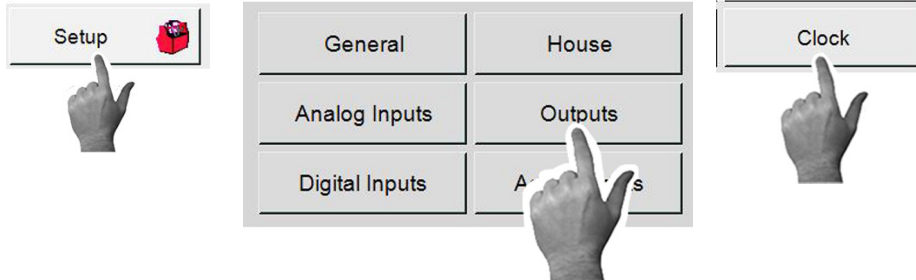
Note: Equipped & Numbers screens must be completed before any Outputs are assigned.

Clocks Tab

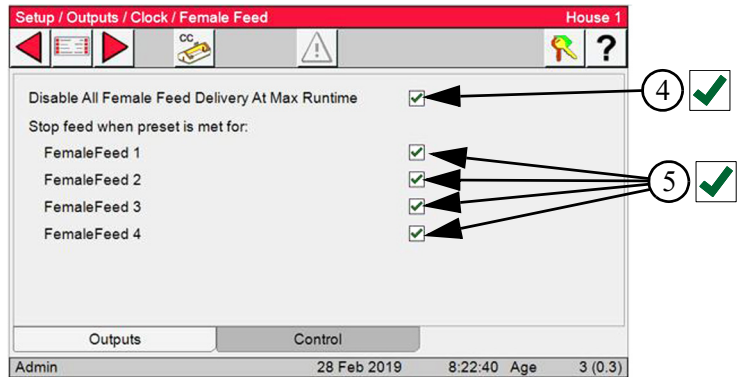
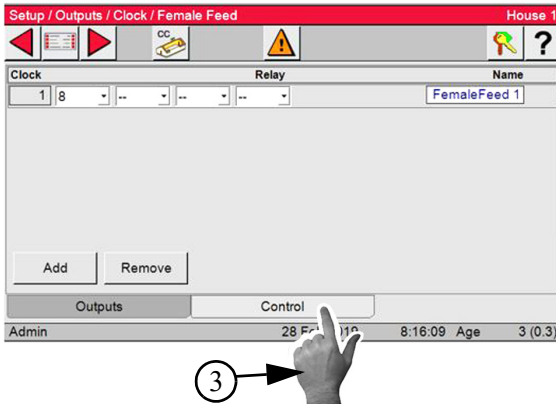
Note: Four output relays can be assigned to each Clock.

Female Feed Clock

1. Go to the Setup/Outputs/Clock Screen and Select Female Feed.
2. Rename if needed. Assign Relays as needed.



3. Select the Control Tab.
4. A check in the (Disable All Female Feed Delivery At Max Runtime box) will turn off the Female Fill when Feeder run time is met.
5. A check in the (Stop feed when preset is met for box's) will turn off the Female feeder when the Preset (current day feed total) is met.



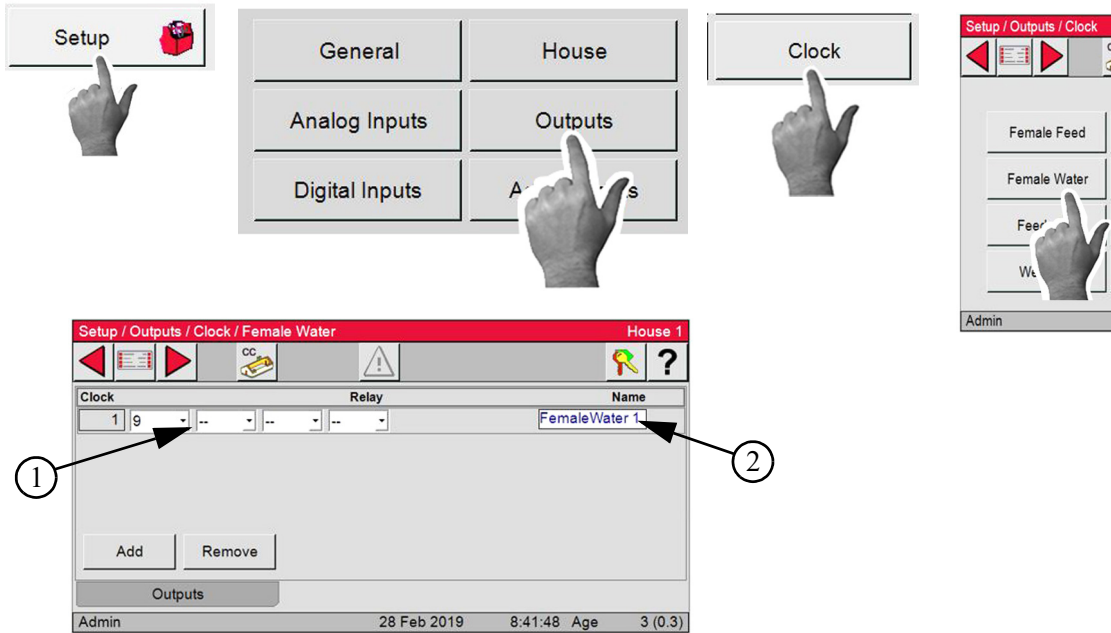
Male Feed Clock

1. Follow the same steps to setup the Male Water Clock.

Female Water Clock

In the Setup/Outputs/Clock/Female Water Screen...

1. Select the Relay or Relays from the drop-downs.
2. Rename if needed.



Male Water Clock

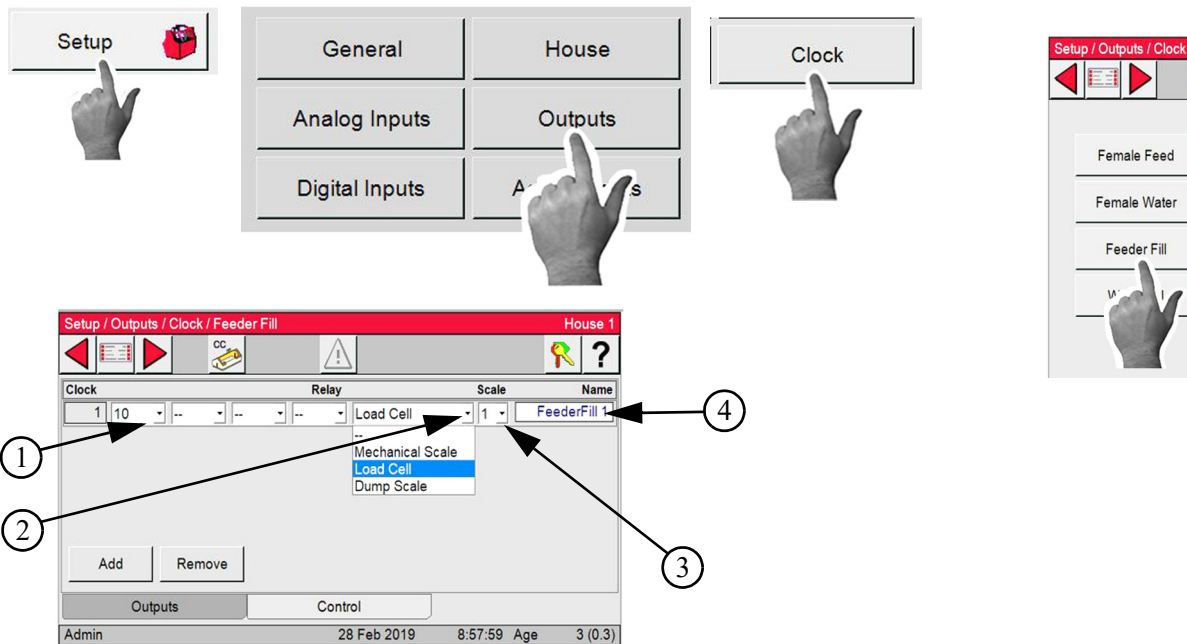
Set up for the Male Water Clock is the same as for the Female Water Clock.

Feeder Fill Clock

In the Setup/Outputs/Clock/Feeder Fill Screen enter....

1. The Relay or Relays from the dropdown.
2. Select the Scale type from the dropdown
3. Select the scale number from the dropdown
4. Rename if needed.

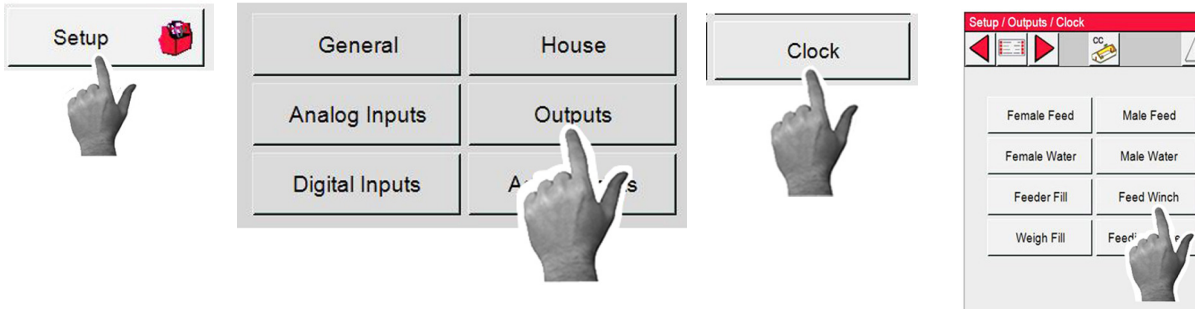
Note: Follow the same steps to setup all Feeder Fill Clocks. **Caution!** Do not allow Weigh Fill and Feeder Fill Times to Overlap.



Feed Winch Clock (Male Feeder Winch)

In the Setup/Outputs/Clock/Feed Winch Screen enter....

- 1.The Relay or Relays from the dropdown.
- 2.Rename if needed.



Light Clock, Spare Clock and PDS Clock

See the Chore-Tronics Manual to set up the Light, Spare and PDS Clocks.

Feeding System (Matrix)

Note: The Feeding System Matrix has to be setup after all Clock Outputs have been assigned and all Clocks have been setup. See “Clocks Setup” on page 22

The Feeding System Screen allows the user to setup six different Feeding Systems. Clocks that are to be used in a specific Feeding System are entered in the Matrix.

Important! It is very important to assign both the Male/Female choice, as well as the line number in this Screen. Failure to do so could cause Clocks to follow the wrong schedule.

The image shows five screenshots of the 'House 1' setup interface for different feeding components, with red arrows pointing to a photograph of a farm with silos. The screenshots are:

- Female Feed:** Shows a table with columns for Clock, Relay, and Name. Row 1 is set to 'FemaleFeed 1'.
- Feeder Fill:** Shows a table with columns for Clock, Relay, Scale, and Name. Row 1 is 'FeederFill 1' and Row 2 is 'FeederFill 2'.
- Weigh Fill:** Shows a table with columns for Clock, Relay, Scale, and Name. Row 1 is 'WeighFill 1'.
- Male Feed:** Shows a table with columns for Clock, Relay, and Name. Row 1 is set to 'MaleFeed 1'.
- Feed Winch:** Shows a table with columns for Clock, Relay, and Name. Row 1 is set to 'FeedWinch'.

The photograph shows several large metal silos. Red arrows indicate the mapping: 'Feeder Fill 1' points to the first silo, 'Feeder Fill 2' points to the second silo, and 'Weigh Fill 1' points to a smaller silo on the right.

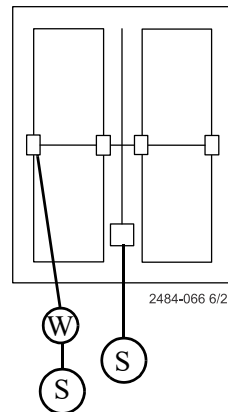
Feeding System Setup Examples

The examples to follow show how the Clocks are assigned and how the Feeding System Matrix would be setup.

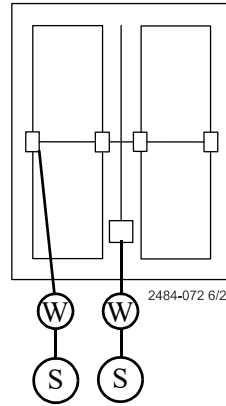
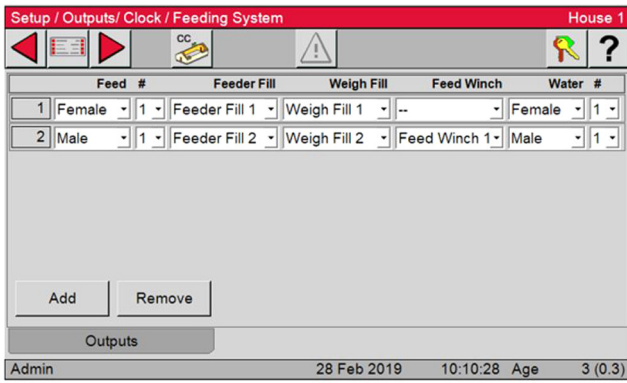
The screenshot shows the 'House 1' Feeding System Matrix with the following configuration:

Feed #	Feeder Fill	Weigh Fill	Feed Winch	Water #
1 Female	1 Feeder Fill 1	Weigh Fill 1	--	Female 1
2 Male	1 Feeder Fill 2	--	Feed Winch 1	Male 1

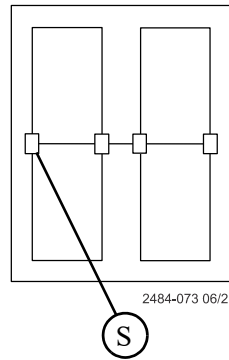
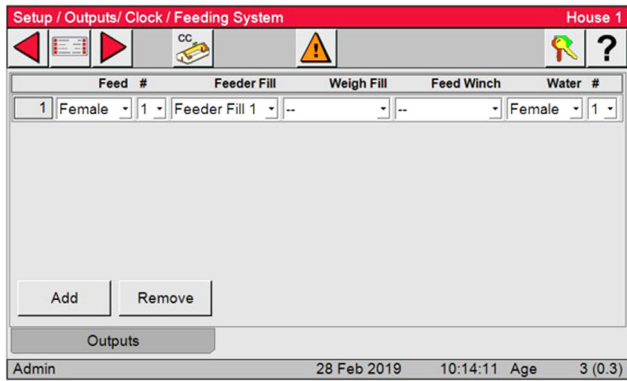
Buttons for 'Add' and 'Remove' are visible below the table. The bottom status bar shows 'Admin', '28 Feb 2019', '10:12:29', 'Age', and '3 (0.3)'.



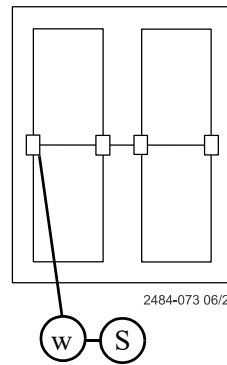
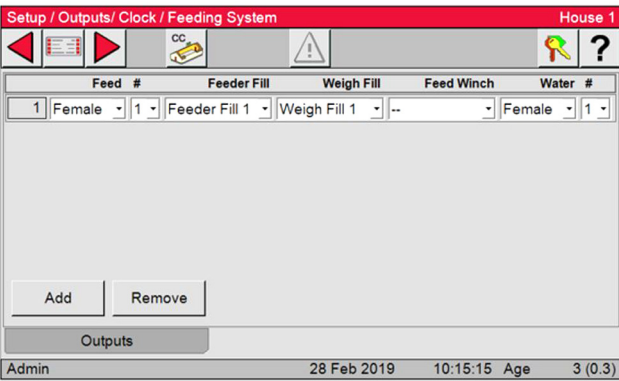
"S"	Supply Bin
"W"	Weigh Bin



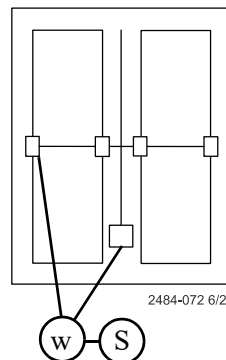
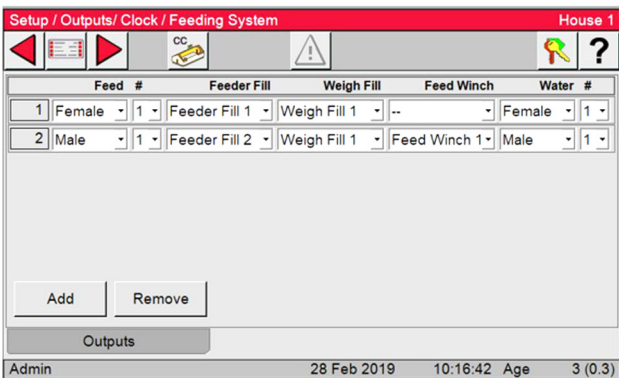
"S"	Supply Bin
"W"	Weigh Bin



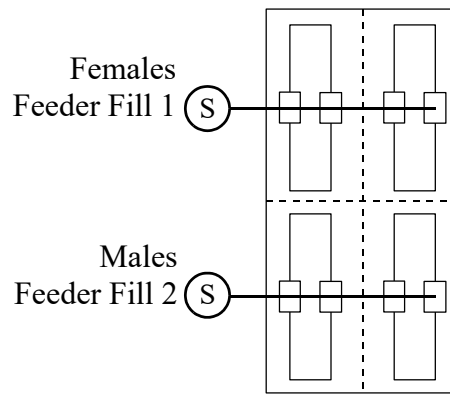
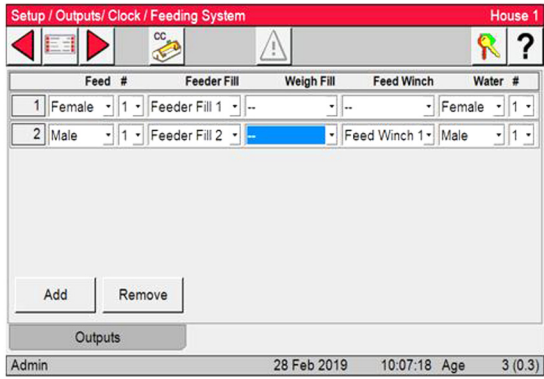
"S"	Supply Bin
"W"	Weigh Bin



"S"	Supply Bin
"W"	Weigh Bin

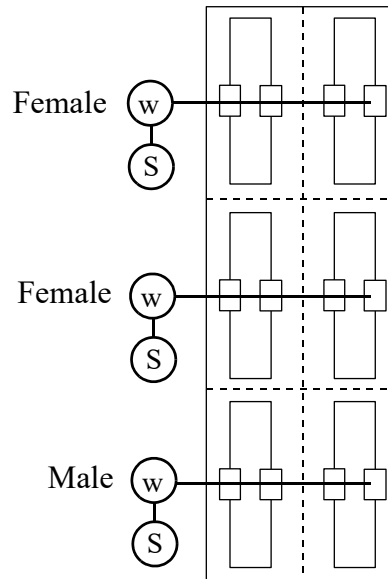
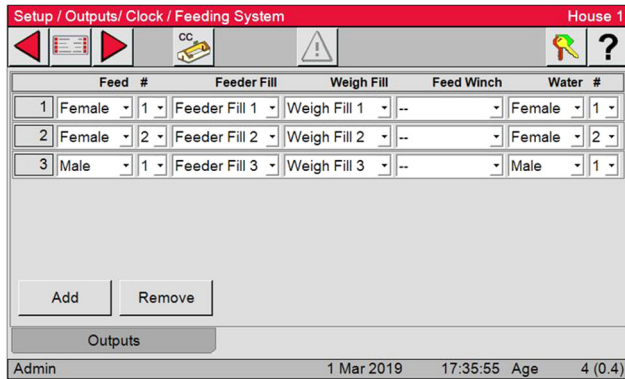


"S"	Supply Bin
"W"	Weigh Bin



"S"	Supply Bin
"W"	Weigh Bin

2484-071 6/21

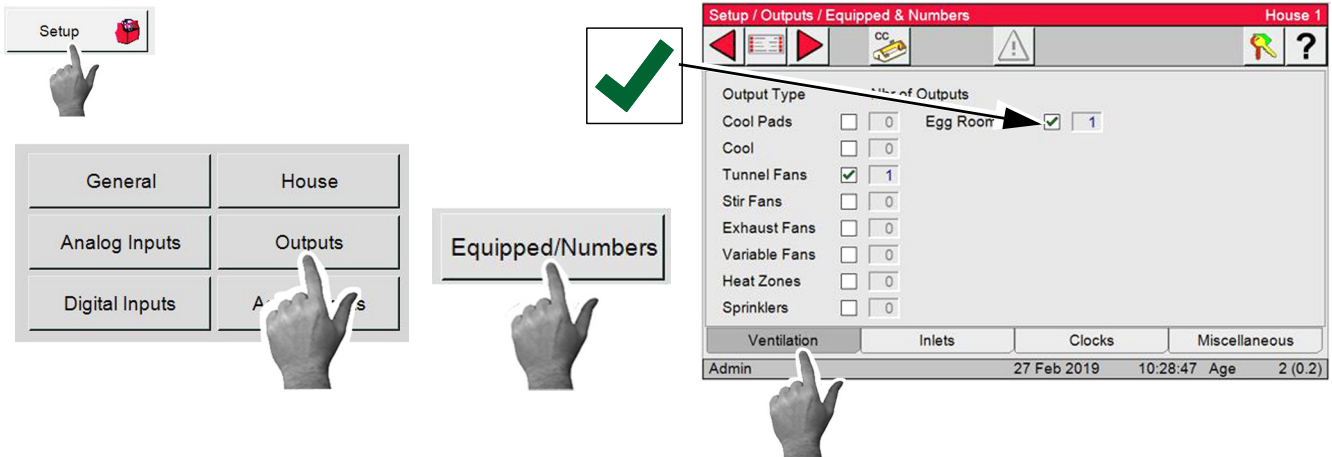


"S"	Supply Bin
"W"	Weigh Bin

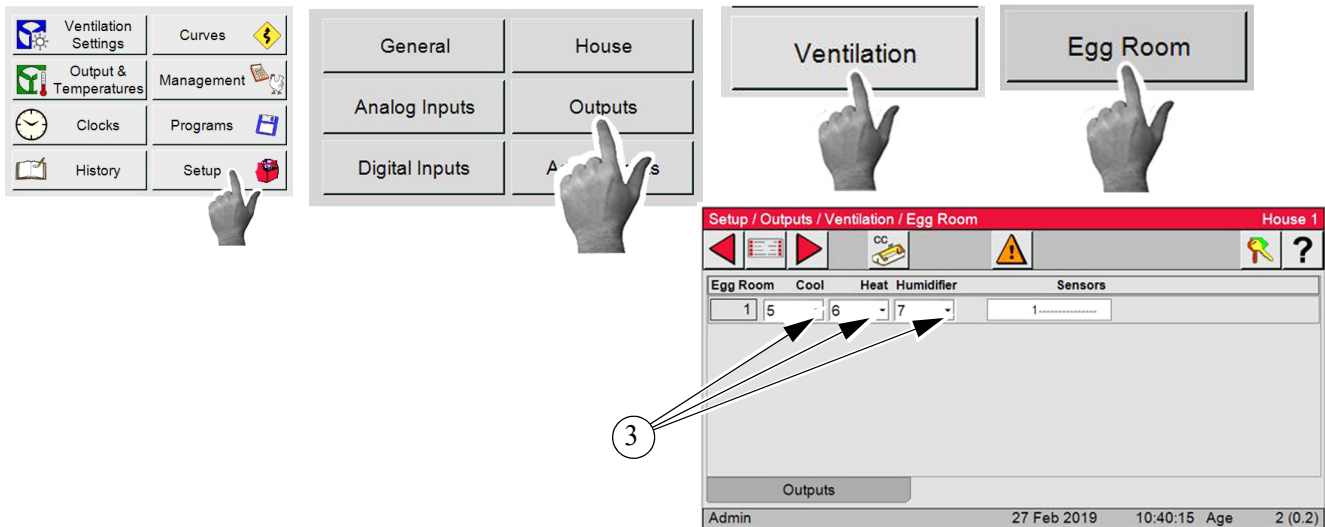
2484-076 6/21

Output Setup Egg Room (Relative Humidity and Temp) Cooler and Humidity

1. In the Setup/Outputs/Equipped and Number screen, under the Ventilation tab check Egg Room.

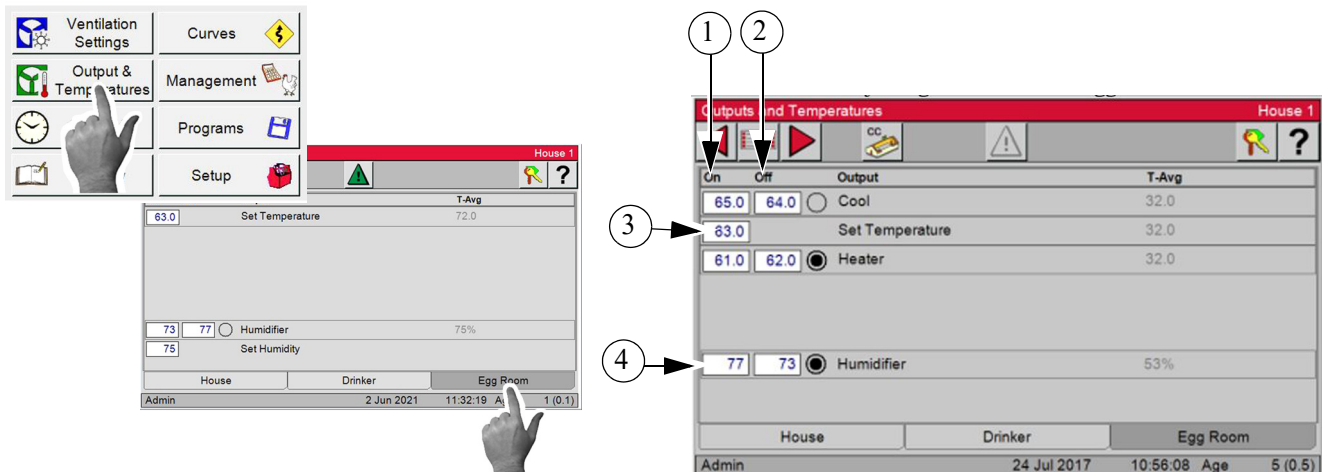


2. In the Setup/Outputs/Ventilation screen select the Egg Room button.
 3. Enter the Relay numbers for the Cool, Heat and Humidifier.



Outputs and Temperatures Screen/Egg Room Tab

1. This column lists the "on" temperatures of the outputs listed.
2. This column lists the "off" temperatures for the cool and heat outputs of the Egg Room only.
3. Set Desired target temperature of the Egg Room.
4. Humidifier-Humidity range at which the Egg Room's humidifier will operate.



Clocks Setup

See “Feeding System (Matrix)” on page 18 for some Setup examples.

Feed Clock

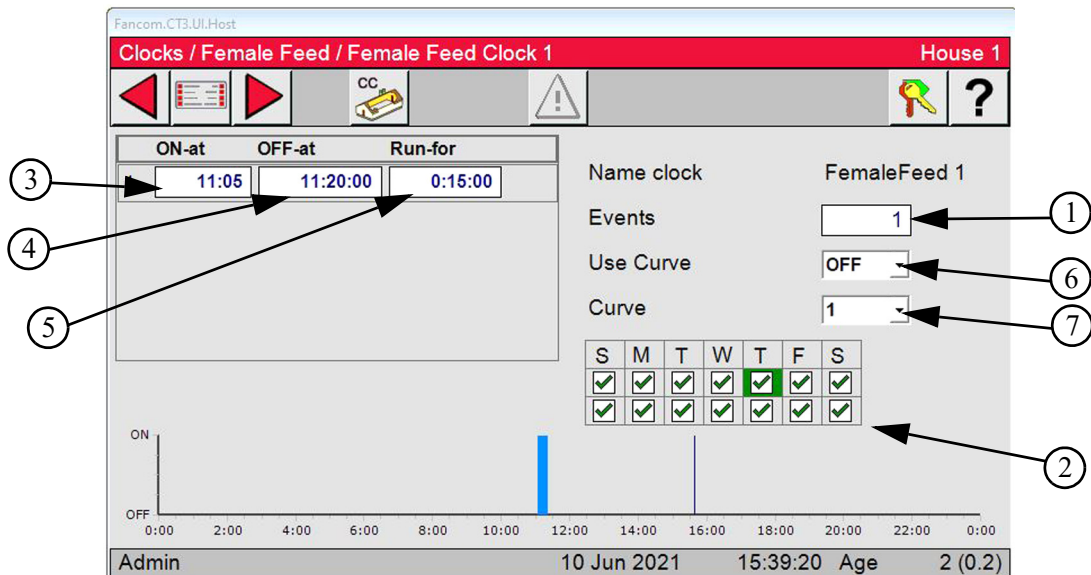
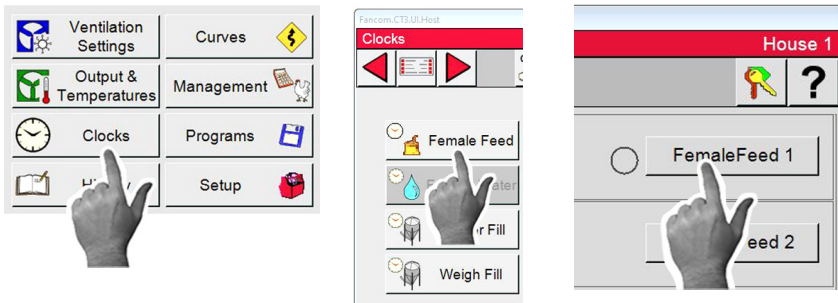
In the Clocks/Female or Male Feed/Female or Male Feed Screen....

- 1.Events: The desired number of timed events. The maximum number is 24.
- 2.Schedule: This is where the Feed and Non-Feed day schedule is set. If a day of the week has a check mark, then the events listed in the clock will happen that day. If a day of the week is blank, then the events listed in the clock will NOT happen that day. The first line of the schedule indicates the Feed and Non-Feed days of the current week. The second line of the schedule indicates the Feed and Non-Feed days of the next week. The schedule will be repeated every two weeks.
- 3.On-at: The time of day that an event will start.
- 4.Off-at: The time of day (hours:minutes:seconds) that an event will turn off.

Note: If Stop feed when preset is met has been setup the Feeder will stop at Preset met.

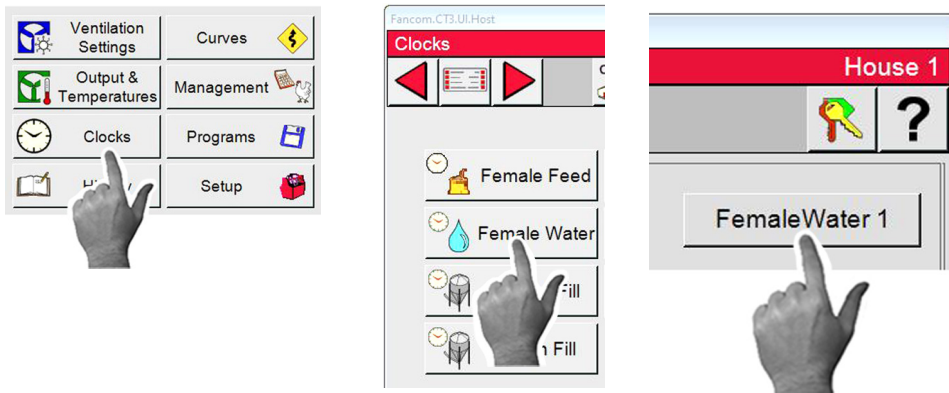
- 5.Run-for: The total time in (hours:minutes:seconds) that the Feeder will run.
- 6.Use Curve: Select On or Off from dropdown. The Curves are selected from the Run For Curves.
- 7.Curve: Select the Curve number you want to use from the dropdown.

Note: Follow the same steps to setup the Male Feed Clock.



Female Water Clock

- 1.On-at: The time of day that an event will start.
- 2.Off-at: The amount of time in (hours:minutes:seconds) that an even will run.
- 3.Run-for: The total time in (hours:minutes:seconds) that the Feeder will run.
- 4.There can be two different water schedules available: one schedule for feed days and one schedule for non-feed days. The Feed and Non-Feed days are determined by the female feed clock run schedule assigned to it in the Feed System Matrix (Feed System Screen). Use the dropdown to select between the Feed day and the Non-Feed day water clock schedules.
- 5.Events: The desired number of timed events. The maximum number is 24.
- 6.Use Curve: Select On or Off from dropdown. The Curves are selected from the Run For Curves.
- 7.Curve: Select the Curve number you want to use from the dropdown.



This screenshot shows the 'FemaleWater Clock 1' configuration screen. At the top, a red header bar contains the text 'Clocks / Female Water / FemaleWater Clock 1' and 'House 1'. Below the header is a toolbar with navigation arrows, a battery icon, a warning icon, and a key icon. The main area is divided into two sections. The left section contains three input fields: 'ON-' with a value of '5:00', 'OFF-' with a value of '12:00:00', and 'Run-' with a value of '7:00:00'. The right section contains a form with the following fields: 'Name clock' (FemaleWater 1), 'Schedule' (Feed Day), 'Events' (1), 'Use Curve' (OFF), and 'Curve' (1). A graph at the bottom shows a blue bar representing the 'ON' period from 5:00 to 12:00. The status bar at the bottom displays 'Admin', '28 Feb 2019', '12:32:37', 'Age', and '3 (0.3)'. Numbered callouts 1 through 7 point to the ON, OFF, Run, Schedule, Events, Use Curve, and Curve fields respectively.

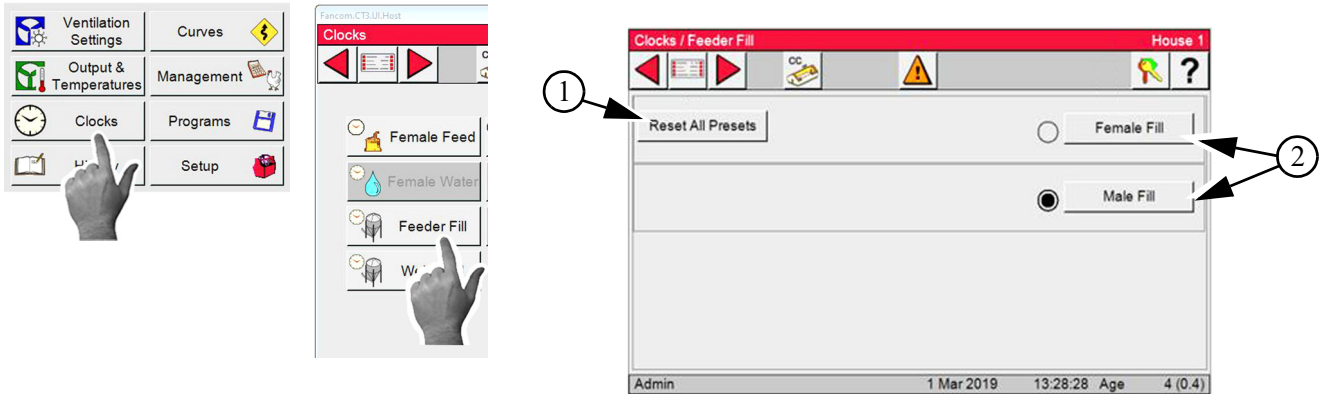
Feeder Fill Clock

The Feeder Fill Clock controls the fill system that supplies the house feeders Male or Female.

The list of Feeder Fills is determined by what was setup in the Setup/Outputs/Clock screen.

The Feeder Fill Clock follows the Feed Day/Non Feed Day schedule of the Feed Clock assigned to in the Feeding System Matrix (Feed System Screen).

1. Reset All Presets: Select this button to Reset all Fill system presets. A Preset is a specific amount of feed needed to be delivered on a Feed day.
2. Fill Clocks: Select the Fill Clock needed to setup.



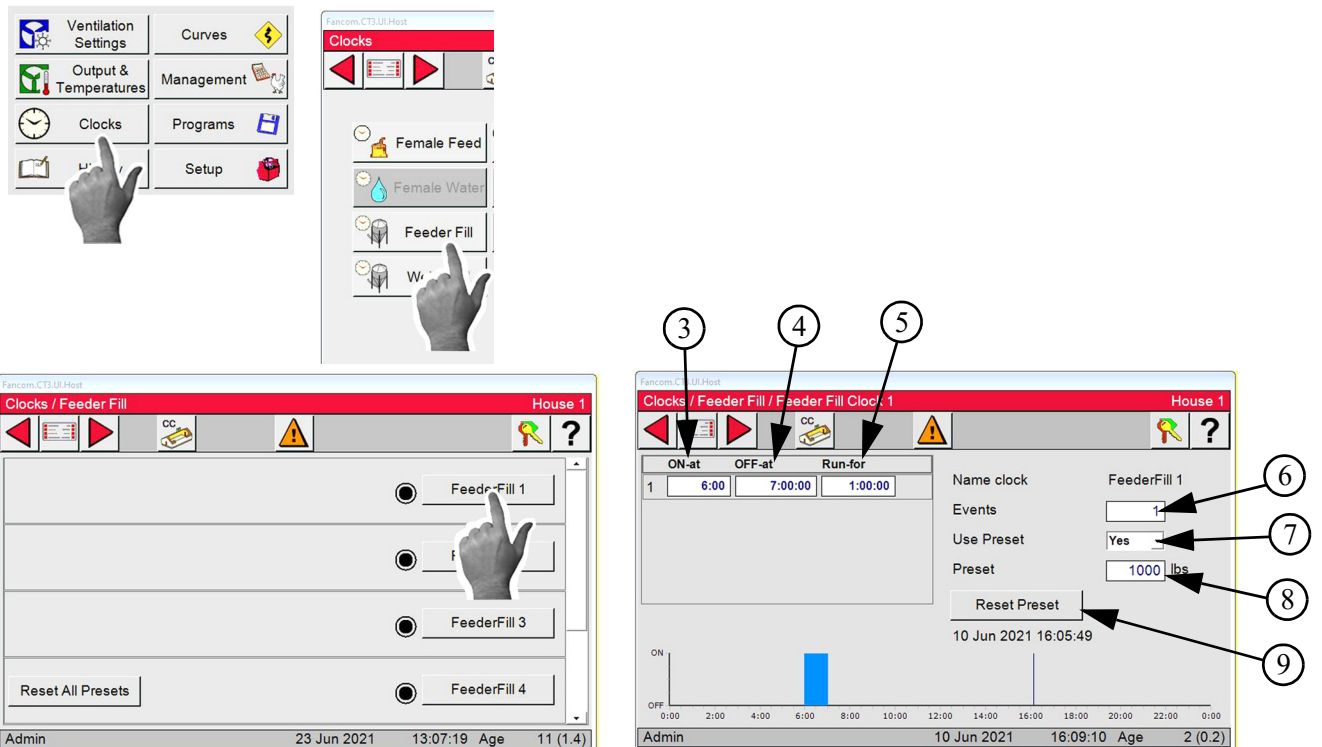
3. On-at: The time of day that an event will start.
4. Off-at: The time of day (hours:minutes:seconds) that an even will run.
5. Run-for: The total time in (hours:minutes:seconds) that the Feeder will run.
6. Events: The desired number of timed events. The maximum number is 24.
7. Use Preset: From the dropdown select Yes or No.

A Preset is a specific amount of feed needed on a Feed day. Used with all Scale systems.

8. Preset: Enter the amount of feed needed for next day feeding.

9. Reset Preset: This button is used to Manual Reset the Preset for the next day feeding.

Note: Follow the same steps to setup all Feeder Fill Clocks. **Caution!** Do not allow Weigh Fill and Feeder Fill Times to Overlap.



Feed Winch Clock

The Feed Winch clock is used to lower the Male Feeder.

1. On-at: The time of day that an event will start.
2. Off-at: The time of day (hours:minutes:seconds) that an even will run.
3. Run-for: The total time in (hours:minutes:seconds) that the Feeder will run.
4. Events: The desired number of timed events. The maximum number is 24.
5. Use Curve: Select On or Off from dropdown. The Curves are selected from the Run For Curves.
6. Curve: Select the Curve number you want to use from the dropdown.

Note: Feed Winch Clock will lower the Male Feed Line only. Line must be manually raised.

Weigh Fill Clock

The Weigh Fill Clock is used to control the Fill system that supplies feed to a Weigh bin on Load cells.

1. On-at: The time of day that an event will start.
2. Off-at: The time of day (hours:minutes:seconds) that an even will run.
3. Run-for: The total time in (hours:minutes:seconds) that the Feeder will run.
4. Events: The desired number of timed events. The maximum number is 24.
5. Use Preset was setup in the Feeder Fill Clock.
6. Preset amount was setup in the Feeder Fill Clock.

Management Screens

Mortality

Mortality Total

The Mortality Total Screen is view only.

Mortality Females

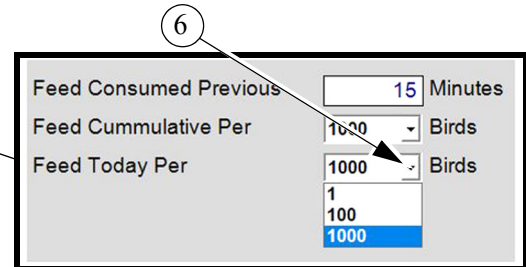
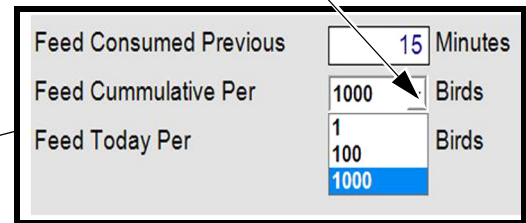
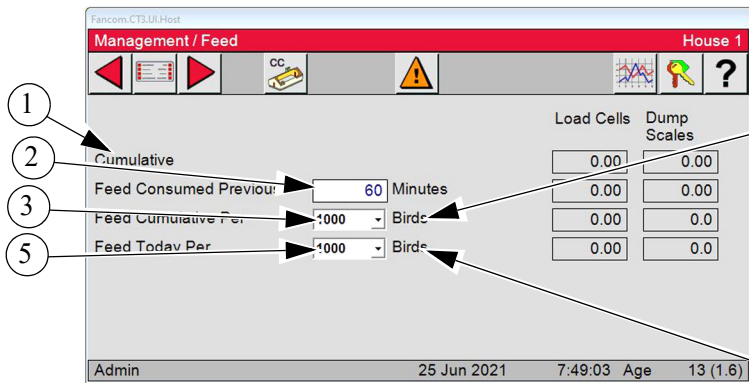
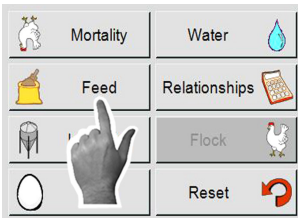
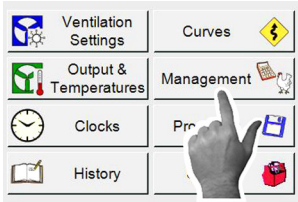
1. Picked Up: Enter today's dead and culled then select Agreed to enter.
2. Initial Housed: Enter the number of Females placed.
3. Partial Taken Out: Enter the number of Females removed.

Mortality Males

1. Picked Up: Enter today's dead and culled then select Agreed to enter.
2. Initial Housed: Enter the number of Males placed.
3. Partial Taken Out: Enter the number of Males removed.
4. Males Spiked: Males placed after initially housed.

Feed

- 1.Cumulative: Amount of Feed consumed from the start of the flock. (Mechanical, Load Cells and Dump Scales).
- 2.Feed Consumed Previous: Editable from 1 to 60 minutes.
- 3.Feed Cumulative Per: Feed Per X number for birds consumed from start of the flock.
- 4.From the dropdown select 1-100 or 1000 Birds.
- 5.Feed Today: Feed Per X number for birds consumed from midnight till current.
- 6.From the dropdown select 1-100 or 1000 Birds.



Inventory

The Inventory screen displays the current Inventory of all bins that have been assigned.

The order of how the bins are display is determined by the user.

1. Select from the three drop-downs for each Bin in the list (Gender, Scale Type and Input).

Note: Select the Add button to add up to 12 Bins

2. Inventory column: The inventory of a Load cell scale is automatically displayed.

3. For the control to display an inventory for the Mechanical and Dump scale the user has to enter all the feed deliveries. This is done by entering the amount of feed delivered then selecting Agree.

4. Name: Edit the Name of the bin if needed.

The image shows two screenshots of the Inventory screen. The top screenshot is a close-up of a bin entry with callouts: 1 points to the Gender dropdown (Male), 2 points to the Scale Type dropdown (Load Cell), 3 points to the Input dropdown (1), and 4 points to the Name field (Bin 1). The bottom screenshot shows the full Management / Inventory screen with callout 3 pointing to the 'Feed Delivered' field for Bin 2.

Bin	Gender	Scale Type	Input	Inventory	Name
1	Male	Load Cell	1	152	Bin 1
2	Female	Mechanical Scale	1	0	Bin 2
	Female	Load Cell	2		
	Female	Dump Scale	3		

Egg

Total Tab

This screen displays the total number of eggs collected (Hand, Auto count and Floor eggs).

1. To display number of eggs per X number of Female. Select from the dropdown 1,100 or 1000 Females.

2. To display number of eggs per X pounds of Feed. Select from the dropdown 1,100 or 1000 lbs.

The image shows two screenshots of the Egg Total Tab screen. The top screenshot shows a dropdown menu with options: /100 Females, /1 Females, /100 Females, and /1000 Females. Callout 1 points to this menu. The bottom screenshot shows a dropdown menu with options: /100 lbs, /1 lbs, /100 lbs, and /1000 lbs. Callout 2 points to this menu. The main screen displays a table of egg collection data.

	Hatching	Culled	Double Yolk	Accumulated
Collected	0 (0)	0 (0)	0 (0)	0 (0)
Today	0 (0)	0 (0)	0 (0)	0 (0)
Week	925 (925)	25 (10)	25 (20)	975 (955)
Total	925 (925)	25 (10)	25 (20)	975 (955)
/1000 Females	92	2	2	97
/1000 lbs	0	0	0	0

Collected Tab

1. Enter the number of Culled eggs.
2. Enter the number of Double Yolk eggs. Select Agreed to save.

The navigation menu shows 'Management' selected. The 'Egg' tab is highlighted in the 'Management / Egg' window. The screenshot shows the 'Collected' data table with the following values:

	Hatching	Culled	Double Yolk	Accumulated
Collected	0	0	0	0
Today	0	0	0	0
Week	0	15	5	20
Total	0	15	5	20

The 'Agreed' button is visible on the right. A hand is shown pointing to the 'Egg' tab and the 'Culled' and 'Double Yolk' input fields.

Manual Counting (If no egg counter is used)

1. Enter the number of Hatching eggs.
2. Enter the number of Culled eggs.
3. Enter the number of Double Yolk eggs.
4. Select Agreed to save.

The navigation menu shows 'Management' selected. The 'Egg' tab is highlighted. The screenshot shows the 'Manual Counting' data table with the following values:

	Hatching	Culled	Double Yolk	Accumulated
Collected	487	12	7	0
Today	0	0	0	0
Week	0	15	5	20
Total	0	15	5	20

The 'Agreed' button is visible on the right. A hand is shown pointing to the 'Egg' tab and the 'Hatching', 'Culled', and 'Double Yolk' input fields.

Floor Tab

1. Enter the number of Hatching eggs.
2. Enter the number of Culled eggs.
3. Enter the number of Double Yolk eggs.
4. Select Agreed to save.

The navigation menu shows 'Management' selected. The 'Egg' tab is highlighted. The screenshot shows the 'Floor Tab' data table with the following values:

	Hatching	Culled	Double Yolk	Accumulated
Collected	0	0	0	0
Today	0	0	0	0
Week	925	10	20	955
Total	925	10	20	955

The 'Agreed' button is visible on the right. A hand is shown pointing to the 'Egg' tab and the 'Hatching', 'Culled', and 'Double Yolk' input fields.

History Screens

Environment

Egg Room Sensors

This screen displays the last 14 days of the Minimum and Maximum temperature as well as the time of day of both.

Day	Temp	Time	Temp	Time
131	62.1	6:52	66.1	16:41
130	61.6	4:37	68.6	16:41
129	63.9	8:12	70.9	16:41
128	61.8	7:41	69.8	16:41
127	61.1	8:36	68.7	16:41
126	62.7	9:51	72.0	18:12
--	--	0:00	--	0:00

Humidity

This screen displays the last 14 days of the Minimum and Maximum Humidity as well as the time of day of both.

Day	%	Time	%	Time
131	62	6:52	66	19:40
130	61	4:37	65	18:31
129	63	8:12	71	16:11
128	64	7:41	69	19:38
127	65	4:37	70	16:41
126	65	9:52	69	16:40
--	--	0:00	--	0:00

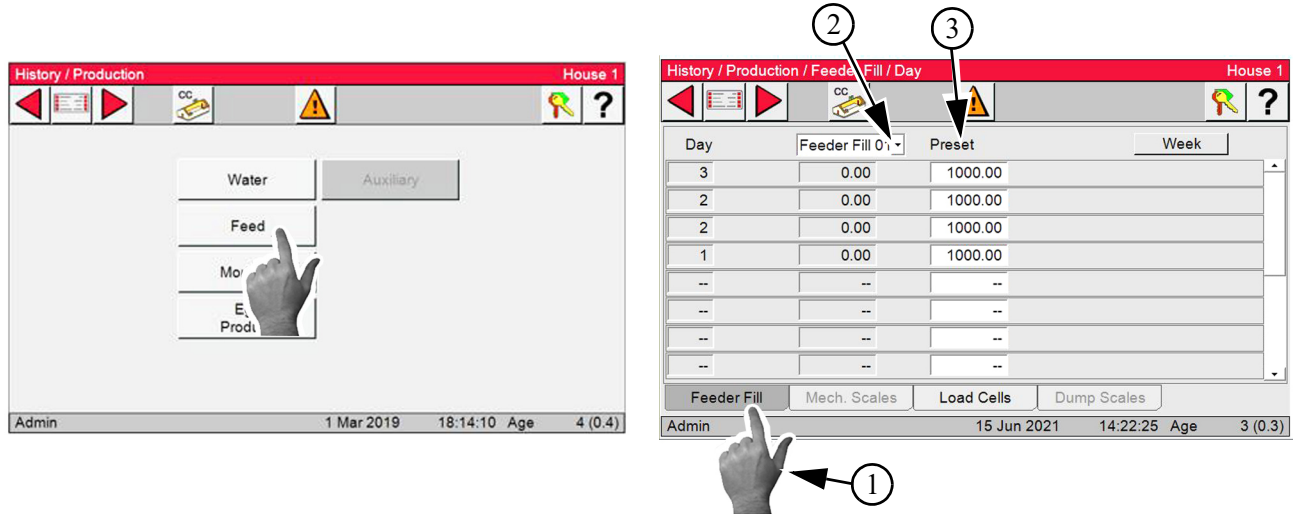
Production

All the History Production screens have a 14 day screen and a 52 week screen.

Note: Water & Mortality have a 100 day history and a 52 week history.

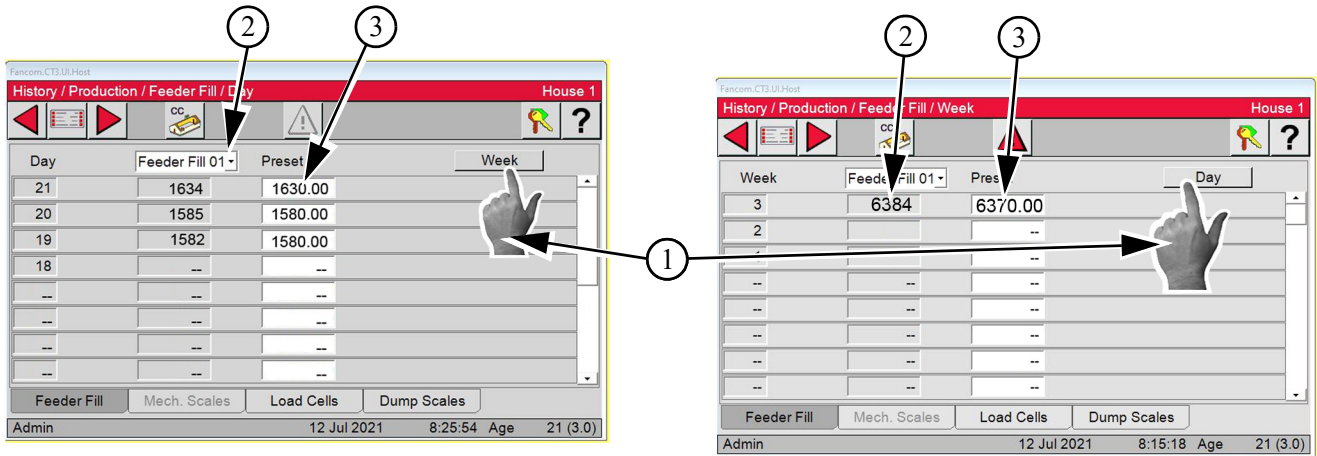
Feeder Fill

1. Select Feed.
2. Select from the dropdown the Feeder Fill you want to view.
3. Select from the Tabs at the bottom of the screen to select Mech. Scales, Load Cells, Dump Scales or Feed line Run Times History.



Day/Week

1. Select to toggle from week to day information
2. Actual amount of Feed delivered for a given week/day.
3. Daily Preset for a given week/day.



Note: The History for Mech.Scales, Load Cells and Dump Scales are in the same format as the Feeder Fill.

The Feed Line Screen is in the same format with the exception it displays the run times of the Feed Lines if applicable.

Wiring

BinTrac to Chore-Tronics Control Wiring

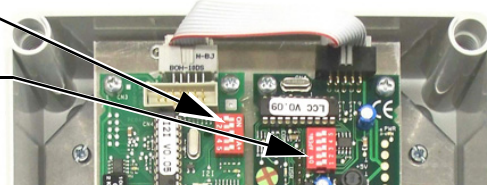
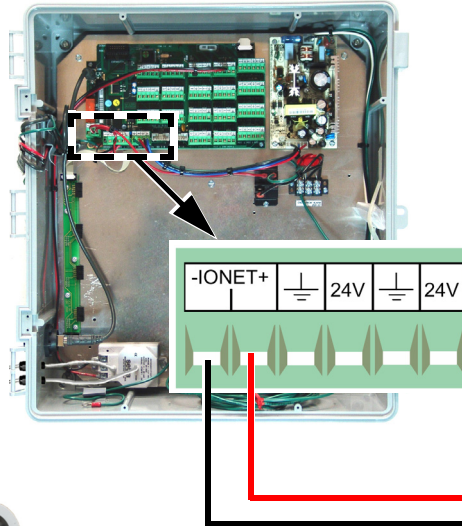
Set I2I Board Dip Switches to one address higher than the last IO addressed used

Set LCC Board Dip Switches all to "Off"

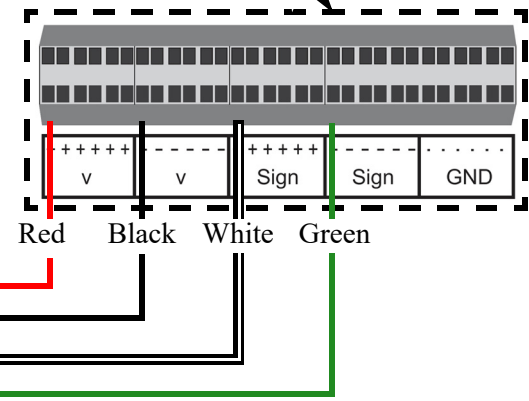
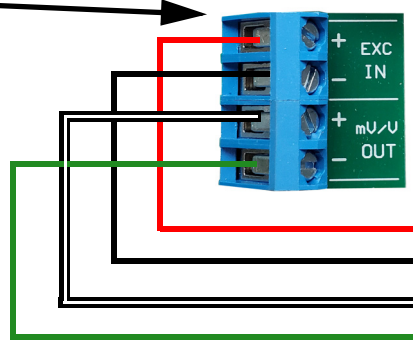
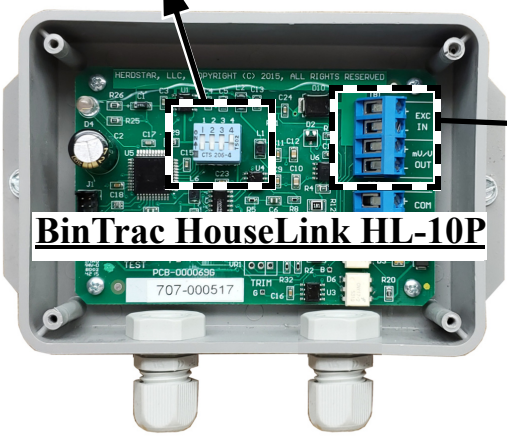
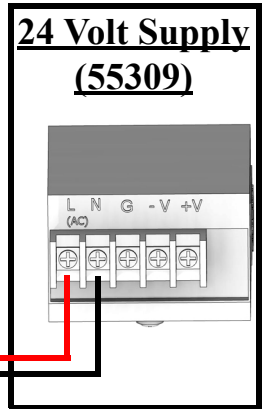
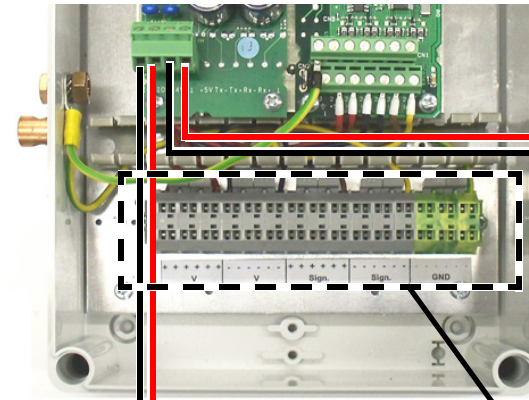
Bin-Trac Dip Switch Settings

Bin	S1	S2	S3	S4	ON
A	Off	Off	Off	Off	
B	On	Off	Off	Off	
C	Off	On	Off	Off	
D	On	On	Off	Off	

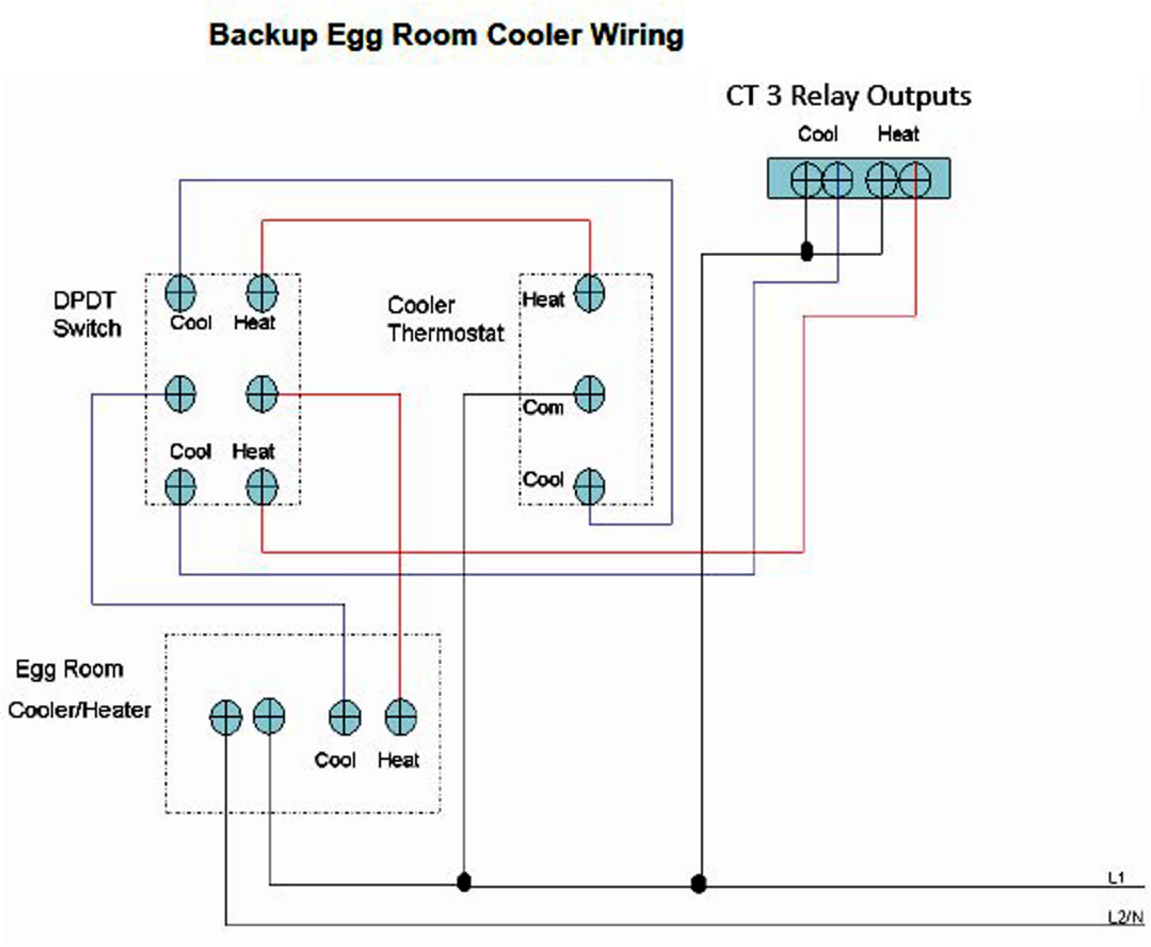
CT3 Control



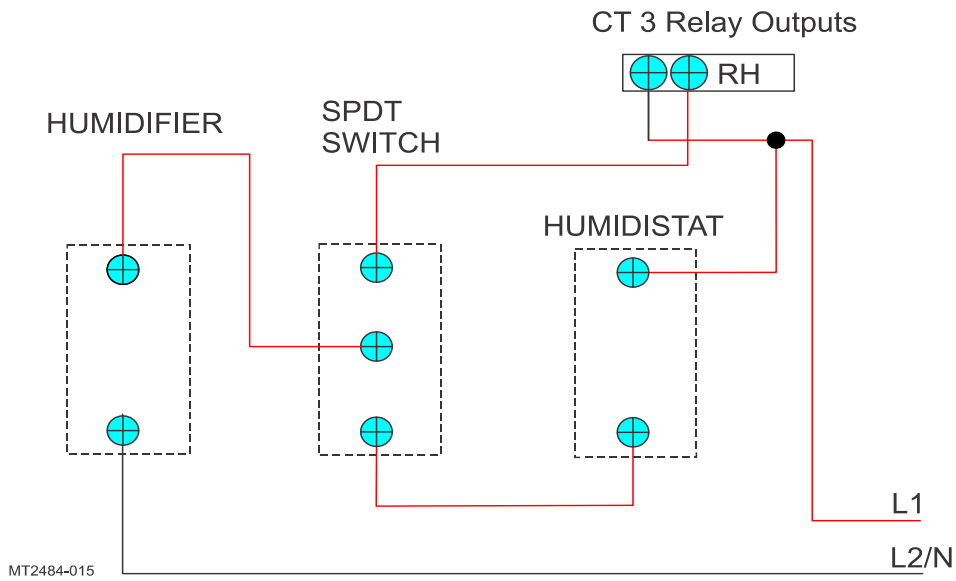
SJB (Scale Junction Box)



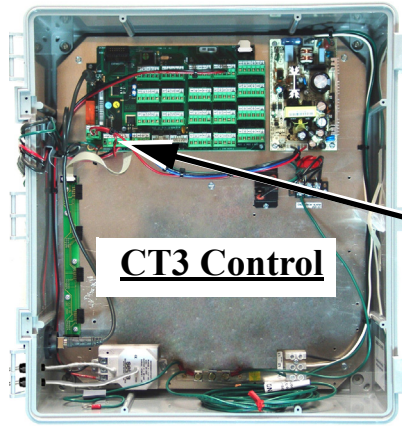
Backup Egg Room Cooler Wiring



Backup Egg Room Humidifier Wiring



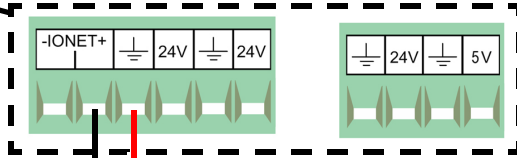
Chore-Time Load Cell Wiring



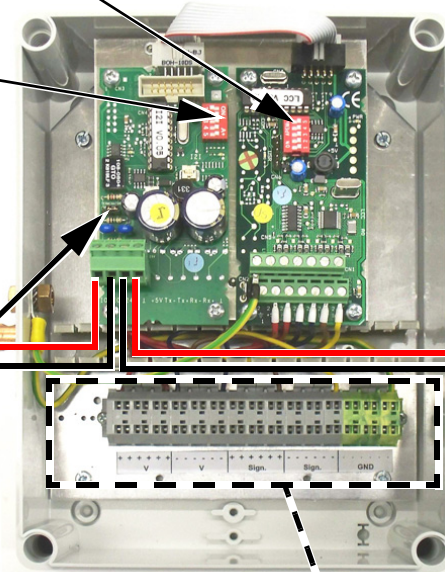
CT3 Control

Set th I2I Board Dip Switches to one address higher than the last IO address used.

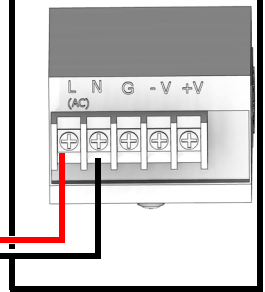
LCC Board Dip Switches all in the "Off" position.



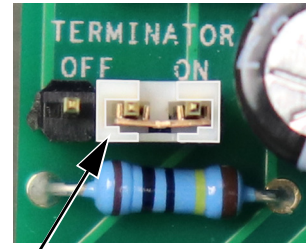
SJB (Scale Junction Box 40733)



24 Volt Supply (55309)



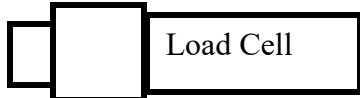
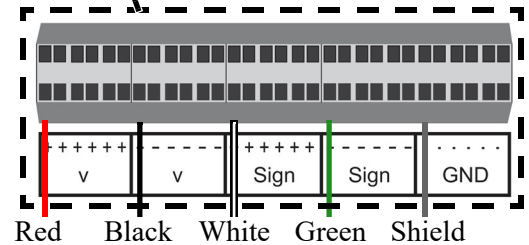
If the SJB is at the end of the IO network, move the IO end of the line jumper to the ON pins.



IO End of Line Jumper (On Position)

Address Settings					
	Dip Switch				
Address #	1	2	3	4	5
3	Off	Off	On	On	On
4	On	On	Off	On	On
5	Off	On	Off	On	On
6	-	Off	Off	On	On
7	Off	Off	Off	On	On
8	On	On	On	Off	On
9	Off	On	On	Off	On
10	On	Off	On	Off	On
11	Off	Off	-	Off	On
12	On	On	Off	Off	On
13	Off	On	Off	Off	On
14	On	Off	Off	Off	On
15	Off	Off	Off	Off	On

"X" is Dip switch in the On position



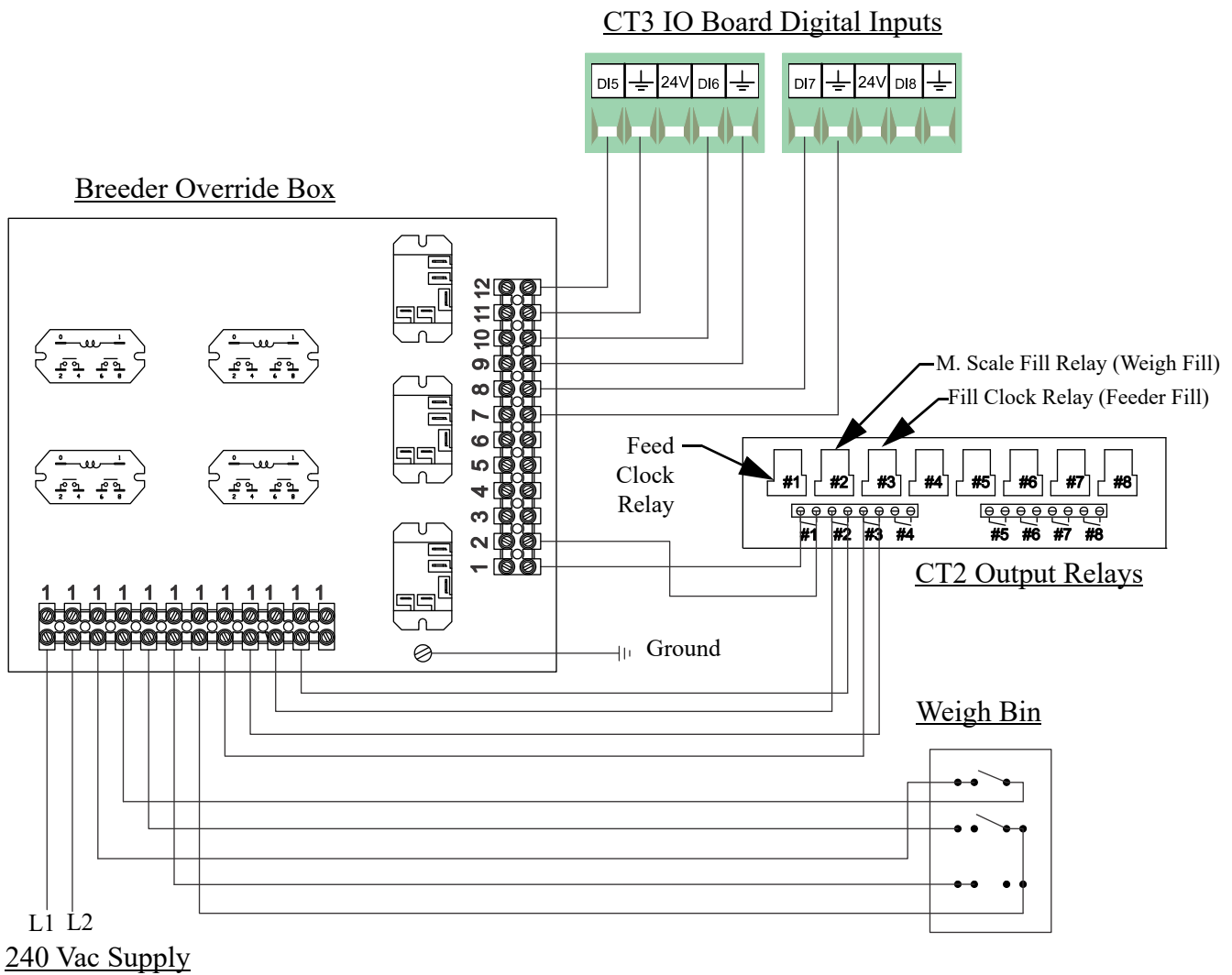
Connect Remaining Load Cells in the same manner. Maximum of 8 Loadcells.

Wiring to Chore-Tronics Control and Weighmatic Scale

The three digital input terminals must be connected to the Chore-Tronics® 3 Controls using twisted pair wire (part no. 42208). Failure to do so could result in improper operation of the feeding system.

External Wiring Terminal 1		
1	L1 Supply	Scale Wiring
2	L2 Supply	
3	Upper Switch Out	
4	Upper Switch Return	
5	Lower Switch Return	
6	Push Button Return	
7	L1 Common	
8	To Control (Feeder Fill Relay)	C-Tronics D1 Wiring
9	From Control (Feeder Fill Relay)	
10	To Weigh Fill Relay	
11	From Weigh Fill Relay	

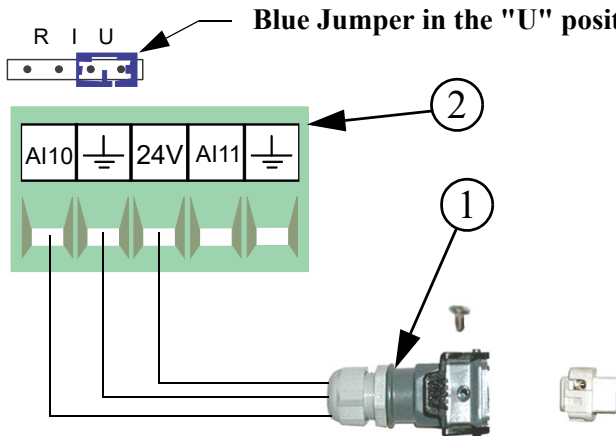
External Wiring Terminal 2		
1	To Control Feeder Line Relay	C-Tronics D1 Wiring
2	From Control Feeder Line Relay	
3		
4		
5		
6		
7	Upper Switch	
8	Upper Switch	C-Tronics D1 Wiring
9	Lower Switch	
10	Lower Switch	
11	Push Button	
12	Push Button	



Relative Humidity Sensor (RH) Wiring

The optional Relative Humidity Sensor (**Item 1**) requires a three-conductor wire to connect the sensor to the Chore-Tronics® 3 I/O board. The Sensor is connected to one of the Analog (AI) Inputs on the IO board.

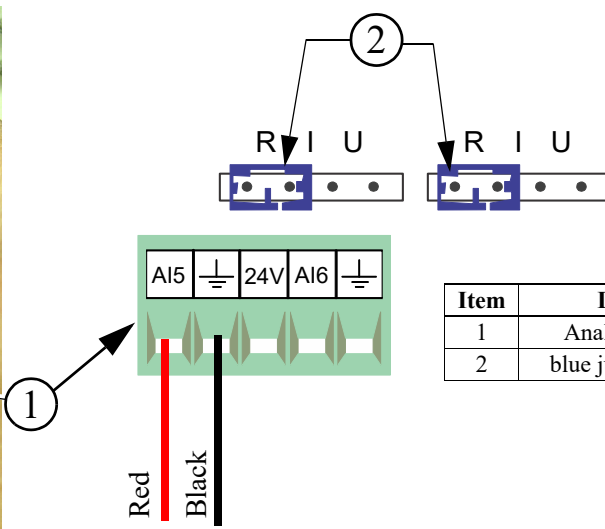
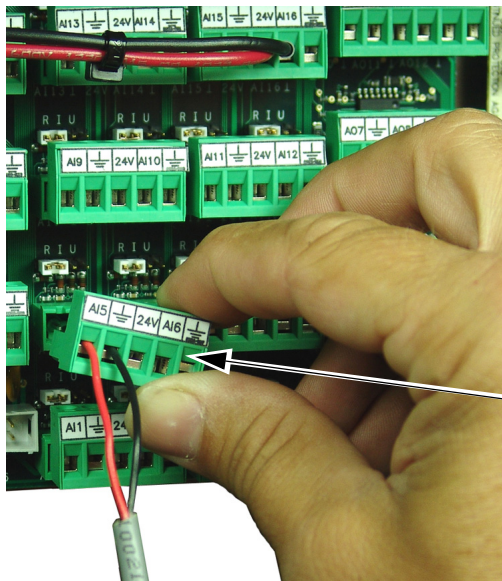
Note: Terminal #1 on the relative humidity sensor is connected to the +24 v terminal on the IO board (see diagram). This is the same +24 v terminal used by the Static Pressure Sensor. Terminal #2 on the Relative Humidity Sensor is connected to the Analog Input (AI) terminal of the analog Input being used (See **Figure 25**). Terminal #3 is connected to the ground terminal of the Analog Input (AI) being used. Make sure that the Blue Jumper above the Analog Input that the RH sensor is connected to is set to "U".



Item	Description
1	Relative Humidity Sensor Quick Connect
2	I/O Board Analog Input (AI) Terminal of your Choice

Temperature Sensor Wiring

Temperature Sensor wires can be connected to any one of the Analog Inputs (AI1 through AI16) of the I/O board. Whatever AI Inputs the Temperature Sensors are connected to, make sure that the blue jumper above each Input is set to "R" as shown. There are no polarity restrictions for the Temperature Sensors.




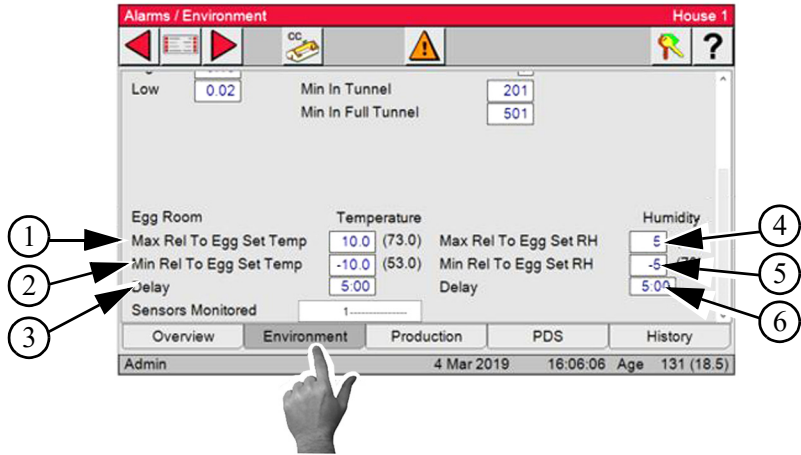
Item	Description
1	Analog Input (AI5)
2	blue jumper set to "R"

Alarms

Egg room Alarm

To setup the Egg Room Alarm parameters Select the Alarm

Button , then Select the Environment tab at the bottom of the screen.

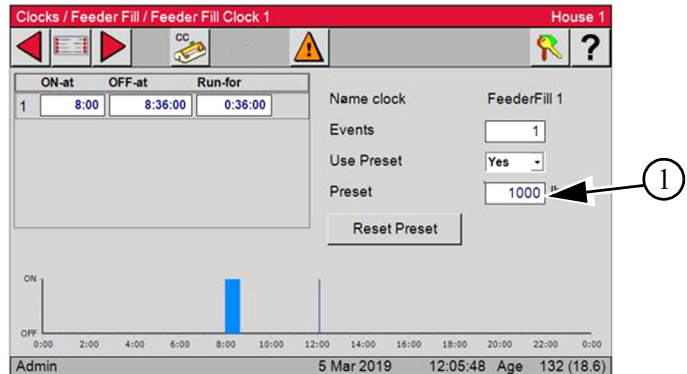
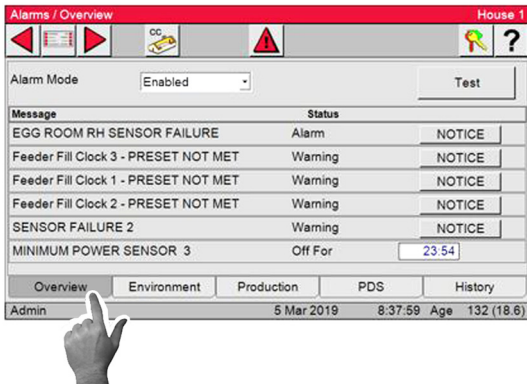


1. Max. Relative to Egg Room Set Temp.
2. Min. Relative to Egg Room Set Temp.
3. Delay: If temperature is outside the range wait XX:XX Min/Sec before Alarm is triggered.
4. Max. Relative to Egg Room Set RH.
5. Min. Relative to Egg Room Set RH.
6. Delay: If temperature is outside the range wait XX:XX Min/Sec before Alarm is triggered.

Preset Not Met Alarm

If the Preset is not met during the Feeder Fill time a Preset Not Met Warning will display in the Overview screen. This is not a Full Alarm so the Alarm relay will not activate.

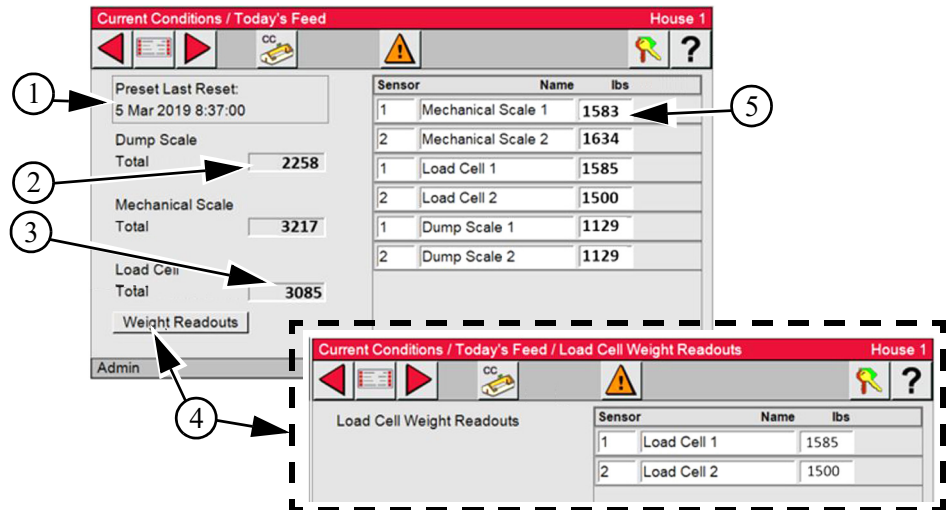
1. The Preset amount is setup in the Feeder Fill Clock screens.



Current Conditions

Today's Feed

1. Preset Last Reset: Date and Time the Preset was reset (Manual or Automatic).
2. Dump Scale: Total of all assigned Dump Scale current weights.
3. Load Cell: Total of all assigned Load Cell weights.
4. Weight Readout button opens the Current Load Cell Readouts. (Load Cells Only)
5. Current Readout of each Scale assigned.



Special Functions

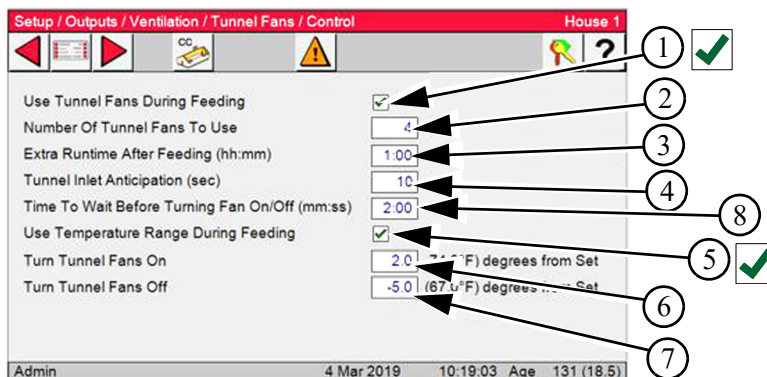
Tunnel Fan at Feeding

Tunnel Fans at Feeding-If it is desired to have extra Tunnel Fans turn on during feeding, the settings are made here. The number of Tunnel Fans to turn on, how long to keep them on after the feeding is over and whether or not to Control the tunnel Fans by Temperature.

1. Put a Check in the "Use Tunnel Fans During Feeding" Box

When Feeding Begins:

- 2. Number of Tunnel Fans to Use.
- 3. Extra Runtime after feeding.
- 4. If in Power ventilation will pre-open Tunnel Doors to the users setting.
- 5. If using temp control, check the "Use Temperature Range During Feeding" box.
- 6. Degrees above set temperature to start turning extra Tunnel Fans back on.
- 7. Degrees below set temperature to start turning extra Tunnel Fans off (one at a time).
- 8. Time to wait after turning an extra Tunnel Fan on or off before checking the temperature again.



Charts

Bin Weight Chart

Hopper Bin	Capacity Height	Lb./Cubic Ft. to Fill	Number Tons
6' diameter Bins w/60° Hopper			
45-00601	3.1	156.9	11'-6"
45-00602	4.6	231.9	14'-2"
45-00603	6.1	306.9	16'-10"
45-00604	7.6	381.9	19'-6"
7' diameter Bins w/67° Hopper			
45-00721	4.9	245.6	14'-9"
45-00722	6.9	347.0	17'-5"
45-00723	9.0	448.4	20'-1"
45-00724	11.0	549.8	22'-9"
45-00725	13.0	651.2	25'-5"
45-00726	15.1	752.6	28'-1"
9' diameter Bins w/60° Hopper			
45-00901	8.6	427.6	15'-7"
45-00902	12.0	597.6	18'-3"
45-00903	15.4	767.6	20'-11"
45-00904	18.8	937.6	23'-7"
45-00905	22.2	1107.6	26'-3"
45-00906	25.6	1277.6	28'-11"
45-00907	28.9	1442.6	31'-7"
12' diameter Bins w/60° Hopper			
45-01201	17.8	887.5	19'-5"
45-01202	23.7	1186.0	22'-1"
45-01203	29.7	1484.4	24'-9"
45-01204	35.7	1782.9	27'-5"
45-01205	41.6	2081.3	30'-1"
45-01206	47.6	2379.9	32'-9"
45-01207	53.6	2678.3	35'-5"
15' diameter Bins w/60° Hopper			
45-01502	41.5	2076.0	25'-10"
45-01503	50.9	2542.5	28'-6"
45-01504	60.2	3008.6	31'-2"
45-01505	69.5	3474.9	33'-10"
45-01506	78.8	3941.2	36'-6"
45-01507	88.2	4407.5	39'-2"
45-01508	97.5	4873.8	41'-10"

Figure 2. Bin Capacity and Units Chart



Chore-Tronics® 3

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Revisions to this Manual

Page No.	Description of Change	ECO
	New Manual	34389

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