## Champion C Series Touchscreen Manual

Software version 20190815



Have this information ready when calling in about your equipment:

 Model:
 \_\_\_\_\_\_

 PLC firmware version:
 \_\_\_\_\_\_

 Warranty Start Date:
 \_\_\_\_\_\_\_

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Illustrations in this guide are for reference only and may depict optional features that are available at additional costs.

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## Superior product handling solutions



PRESS HERE TO GOTO INPUT/OUTPUT SCREEN

About

Run Conveyor Feeder

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### **RUN SCREEN [START UP]**

NOTE: All settings from previous power down will be retained



#### Catch Tray:

If your conveyor is equipped with an optional catch tray at the discharge, then control upon the index movement is triggered by a sensor in the tray itself. If the tray holds a completed order, then the line will not advance until that order is pulled from the catch tray. The screen will show the catch tray status and all START/STOP buttons are cleared from the panel.



#### Waiting on Downstream:

The system can be wired to optional downstream devices such as a wrapper or bander. These devices will hold the conveyor while they're busy or in an error state. A message will appear to indicated the system is waiting on these devices.



#### Feeder Status with ON/OFF controls:

Busy and Fault status for each feeder is displayed here on the RUN screen.

Controls to turn a feeder to ENABLED and whether or not to allow it's fault status stop the line FAULT ON are on this screen. A GREEN indicator shows an ON condition for each push button.

A PURPLE indicator will show a BUSY feeder and a FAULTED feeder will display RED.

NOTE: You have to have the feeder ON in order to have the feeder trigger in sequence. It is the manufacturer's suggestion to also enable the fault ON as well so that faults from the feeder witll stop the line.

#### **Clear Feeders:**

This button will clear all feeders immediately and turn the Sequence Feeder setting off.

#### **Sequence Feeders:**

The Sequence Feeder button must be set to ON to have the feeders trigger.

The logic works by triggering each feeder in relationship to which pocket they are assigned to. This ensures that each pocket delivered to the end has all the necessary feed components of an order.

When the job is complete, set the Sequence Feeder button to OFF and the FEEDER'S ON/OFF feeders will trigger off in the reverse order. Off

Note: The first feeder to start the sequence can be assigned in the CONVEYOR screen. This allows the setup to skip the first feeders on the line if they are not in use. (I.E., you have a 12 feeder line but only want to use Feeders 4-7. You would set the first feeder in the CONVEYOR screen to 4.

#### Job Size:

The Job size allows you to set a predetermined batch size. Once that count is reached, all feeders will sequence off. This is an index count and not an actual product count in the indexing pockets. To initiate, set the count number by pressing the count push button and then press the OFF push button. The OFF button will switch to ON indicating the job size run is activated. Then push the sequence feeders ON to start the batch run.

When the batch job is complete, a RESET and REORDER option will appear. RESET will turn the Job Size to OFF and REORDER will run the complete Job Size again.

Note: To change Job size counts between runs, you will need to RESET at the end. Enter new count and turn Job Size ON, and sequence feeders ON to initiate

# On



On

JOB SIZE



500



CLEAR FEEDERS

CLEAR



#### Job Count:

The Job Count will display the current number completed within your job set. This counter will reset to zero when the Job Size batch function is RESET or REORDERED.

Note: This is an index count. Its best to run the Discharge Count along with the Job Count for the discharge count will reflect the sets that pass the Batching Tray sensor eye.

#### Run Count:

The Run Count will display the current number of sets the system has fed. It is activated in the CONVEYOR SCREEN (page 6). The counter will reset to zero when the RESET COUNT button is pressed on the CONVEYOR SCREEN screen.

#### System Faults:

When a run error or fault occurs that requires operator intervention a flashing message will appear at the top of the screen. Describing the error or fault and corrective action. Perform the corrective action to restart the system.

FEEDER FAULTED, CHECK AND RESET FEEDERS TO CONTINUE

ESTOP PRESSED, PULL OUT ESTOP BUTTON TO CONTINUE

DOWNSTREAM DEVICE (WRAPPER/BANDER) STOPPED, CHECK DEVICE TO CONTINUE THEN PRESS SYSTEM RESET

INTEGRATION DEVICE (CAMERA/READER) ERROR, CHECK DEVICE TO CONTINUE THEN PRESS SYSTEM RESET

CONVEYOR FLIGHT TIMEOUT, CHECK FOR JAMS AND PRESS SYSTEM RESET TO CONTINUE

CONVEYOR PROX TIMEOUT, CHECK FOR JAMS AND PRESS SYSTEM RESET TO CONTINUE

SERVICE STOP INITIATED, RESET LATCHED STOP TO CONTINUE

FORCES ENABLED, PRESS SYSTEM RESET TO CLEAR FORCES AND CONTINUE **System Reset:** Some errors or faults are latching, requiring the operator to press system reset to continue. This button will appear in the upper right corner of the screen.

SYSTEM RESET



50

#### **CONVEYOR SCREEN**

#### PASSWORD PROTECTED SCREEN: "Supervisors" and "Maintenance/Setup"



#### Catch Tray ON/OFF:

Activation of catch tray usage is done here.

#### Conveyor Mode:

Switching from conveyor CONTINUOUS or INDEX mode is performed here.

#### Feeder # Start:

Set's which feeder on the line will begin sequencing.

Range 1-12

#### LAST PROX PULSES:

Viewing window to verify accuracy of Pocket length. Displays last completed cycle. Each count =1/2" of chain travel. [I.E. 48 = 24" lug setup]



#### Index Hold (S): (only visible in INDEX mode)

Set how long to hold an index before advancing the next index.

Range - .1 to 9.9 seconds

Manufacturer suggestion for Index Hold:

Set this value high to begin with and turn down as machine settings and adjustments are tuned in. If the feeders utilized on your conveyor line have BUSY functions, the indexing conveyor will hold until the feeder is completed it's cycle. But if any feeder is not equipped with the BUSY function, then utilizing the index hold is where you will match the indexing conveyor movement to the feeder cycle completion.

#### **Run Counter:**

Here is where you will activate the Run Counter to be visible and operable on the RUN SCREEN. A green ON indicator will appear once the slide switch push button is depressed. To clear the count, press the RESET COUNTER



#### **Optional Integration Device Hold:**

The system can be wired to monitor an optional integration device such as a barcode reader or scanner. When enabled a fault or error will occur when the wired signal indicates a problem.

Refer to the electrical schematics for wiring details. OPT

#### **FEEDER SCREEN**



#### PASSWORD PROTECTED SCREEN: "Supervisors" and "Maintenance/Setup"

Pocket Number:

Assigns feeder to the conveyor pocket it's mounted over.

#### Cycle Delay (in):

The cycle trigger can be held for a period of conveyor movement before being sent to the feeder to cycle. This allows positioning of the product in relation to pocket.

Range 0 - 25 inches (.5 inch increments)

#### Feed on Stop: (ONLY visible and usable in INDEX conveyor mode)

When ON, the feeder will trigger at the stop of the index conveyor movement. When OFF, the feeder will trigger at the start of the index conveyor movement.

Manufacturer suggestion for Feed on Stop:

This setting may be useful when for example, using a in-LINE catch tray and batching a quantity of 4. You would want to trigger the feeder on the stop and utilize the Conveyor INDEX hold or if connected, the feeder BUSY and allow time for the feeder to batch it's count before indexing the conveyor lug. If utilizing an over-the-line batch dropper than set the Feed on Stop to OFF and utilize the Cycle delay to position the drop into the index pocket.

NOTE: the Cycle Delay is not usable when the feeder is set to Feed on Stop, as the feeder trigger is sent immediate when the conveyor reaches a index stop.

#### Cycle Hold (ms):

The cycle signal sent to the feeder can be held ON for a period of time.

Range 20msec - 2000msec

Manufacturer suggestion for Cycle Hold:

Leave this value at the default value of 20msec if just triggering a feeder to cycle. There may be scenarios where the cycle is triggering an auxiliary piece of equipment (I.E. Dropper) before cycling the feeder. In that scenario, it may be required to hold this cycle ON for a period of time.

#### Fault Polarity:

This is set either NC or NO dependent on what type of feeder is being used. If the feeder outputs on it's READY mode then set this control to NC. If the feeder outputs on it's FAULTED mode then set this to NO.

#### **ABOUT SCREEN**



**Software Version:** Required when calling for service.

Admin screen tab: Only access to user level passwords. See next page.

#### **ADMIN SCREEN**

#### PASSWORD PROTECTED SCREEN: "Supervisors"



#### ASSIGN:

Sets up to 4 digit password for user screens.

Supervisors - ADMIN SCREEN

Maintenance/Setup - CONVEYOR SCREEN FEEDER SCREEN



NOTE: Shipped from factory with "0" as the password for both. Contact SPHS service department if passwords are lost. Factory code can be supported with serial number and software version provided.

## **OPERATORS NOTE PAGE**