BinTrac®

Installation and Operation Manual

HouseLink HL-10C

HerdStar®

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Description

The HouseLink HL-10C provides a CAN bus interface to the CAN bus controller.

The HouseLink HL-10C is designed to be used with the BinTrac Bin Weighing system. One HouseLink HL-10C can be connected to one BinTrac indicator and can connect with a maximum of four bins.

Installation

1. The HouseLink HL-10C should be mounted no more than 10 feet from the CAN bus controller.
2. Using a two-conductor cable (ordered separately), connect the GREEN wire from the Smart Summing Box to the +COM terminal in the HouseLink HL-10C and the White wire from the Smart Summing Box to the -COM terminal in the HouseLink HL-10C.
3. Connect the HouseLink HL-10C to the CAN bus controller by connecting the **CAN (HI)** to the **CAN (HI)** terminal and the **CAN (LO)** to **CAN (LO)** terminal of the CAN bus controller.
4. Finally, connect the **24V (+)** from the HouseLink HL-10C to the **24V (+)** of the CAN bus controller and the **24V (-)** from the HouseLink HL-10C to the **24V (-)** of the CAN bus controller.

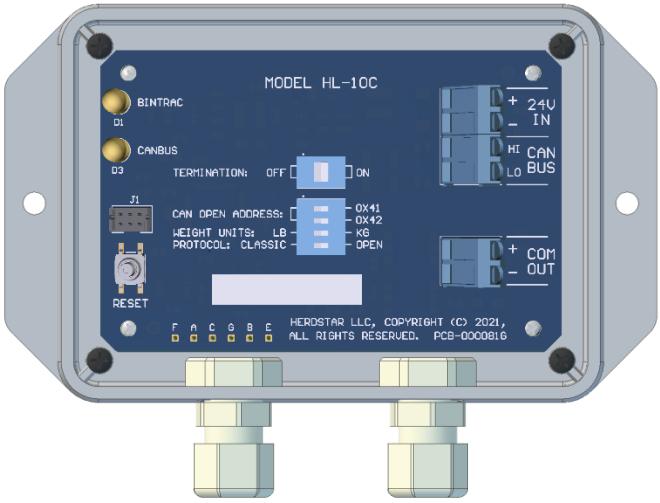


Figure 1

HL-10C Interface	*BinTrac Indicator (BINS Port)*
+COM (OUT)	+ SIG (GREEN wire)
-COM (OUT)	- SIG (WHITE wire)
HL-10C Interface	***CAN Bus Controller***
CAN BUS (HI)	CAN (HI)
CAN BUS (LO)	CAN (LO)
24V IN (+)	24V (+)
24V IN (-)	24V (-)

Table 1

5. The unit has dip switches that needs to be set up for configuration. See **Figure 2** for dip switch identification.

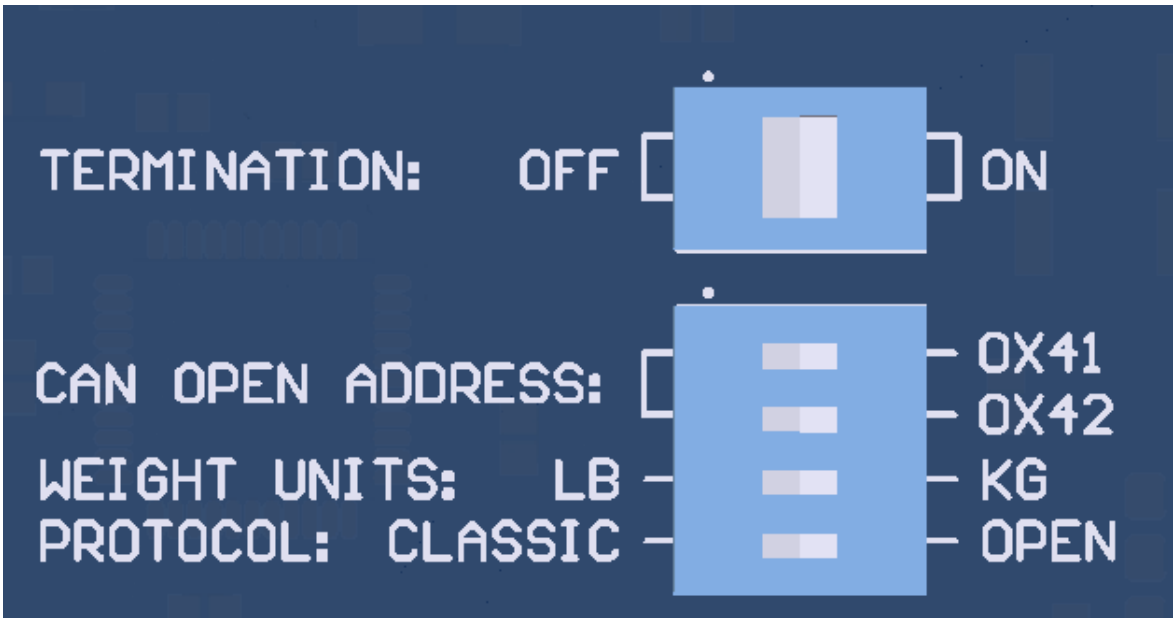


Figure 2

BinTrac Indicator Setup

The BinTrac Indicator must be set up for peripheral devices. Access the SETUP menu on the BinTrac Indicator by pressing and holding the BIN key for until SETUP is displayed on the screen, then release BIN key. With SETUP displayed, press the BIN key until BIN D is selected. Use the UP/DOWN arrows to enable peripheral devices (BIN D LED is solid ON).

The Bin LEDs indicate configuration options as being enabled (solid on) or disabled (flashing).

Bin A – Configures BinTrac Monitor as a Remote Display.

Bin B – Enable ASCII Serial Communications Command Set

Bin C – Enable Weight Broadcast.

Bin D – Enable communications to peripheral devices.
This must be enabled when BinTrac Indicator is connected to the HouseLink HL-10C.

LED Operation

CAN Bus Status LED:

SLOW FLASH – This indicates the unit is communicating and operating normally.
STEADY ON – This indicates the unit is not communicating but has power.
NO LIGHT – The unit doesn't have an adequate power source

BinTrac Status LED:

SLOW FLASH – This indicates the unit is communicating and operating normally.
FAST FLASH – This indicates the unit is in TEST mode.
STEADY ON – This indicates the unit is not communicating but has power.
NO LIGHT – The unit doesn't have an adequate power source

Testing and Calibration

Reset/Test button:
Once the unit is wired up properly, the unit can be put into one of five test modes. These modes are useful when setting up and testing with the CAN bus controller.

Test 1 – Press the Reset/Test button on the board once and the unit will output 0% full scale weight.

Test 2 – Press the Reset/Test button on the board twice and the unit will output 25% full scale weight.

Test 3 – Press the Reset/Test button on the board three times and the unit will output 50% full scale weight.

Test 4 – Press the Reset/Test button on the board four times and the unit will output 75% full scale weight.

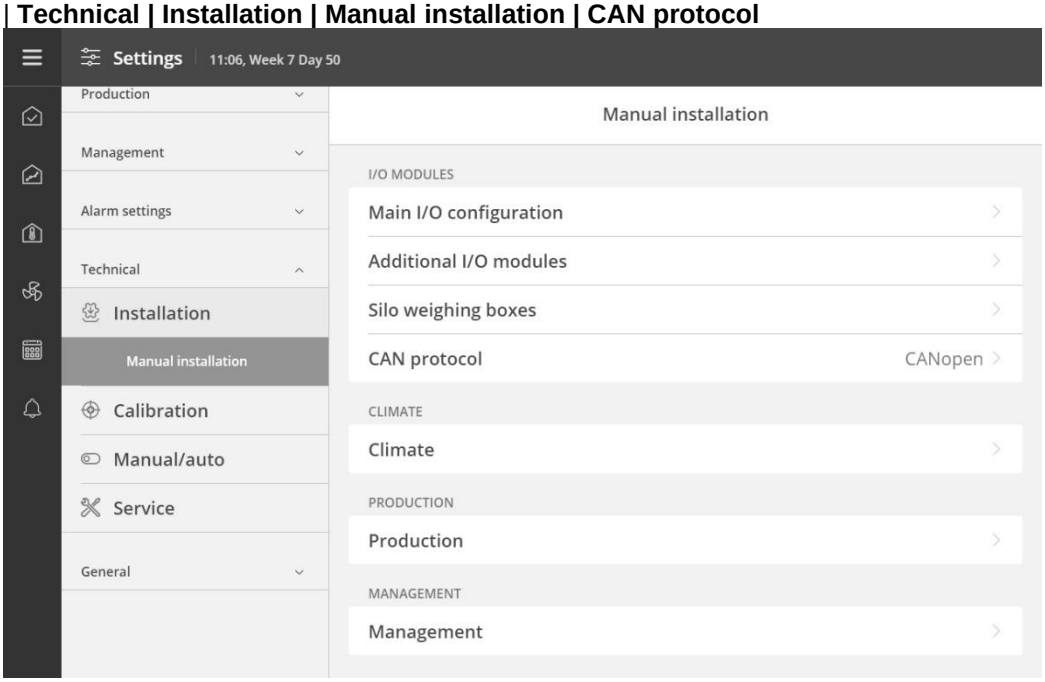
Test 5 – Press the Reset/Test button on the board five times and the unit will output 100% full scale weight.

Pressing the test button a sixth time will return the unit to normal operation. If the unit is left in test mode, it will automatically return to normal operation after five minutes.

CAN Open Setup

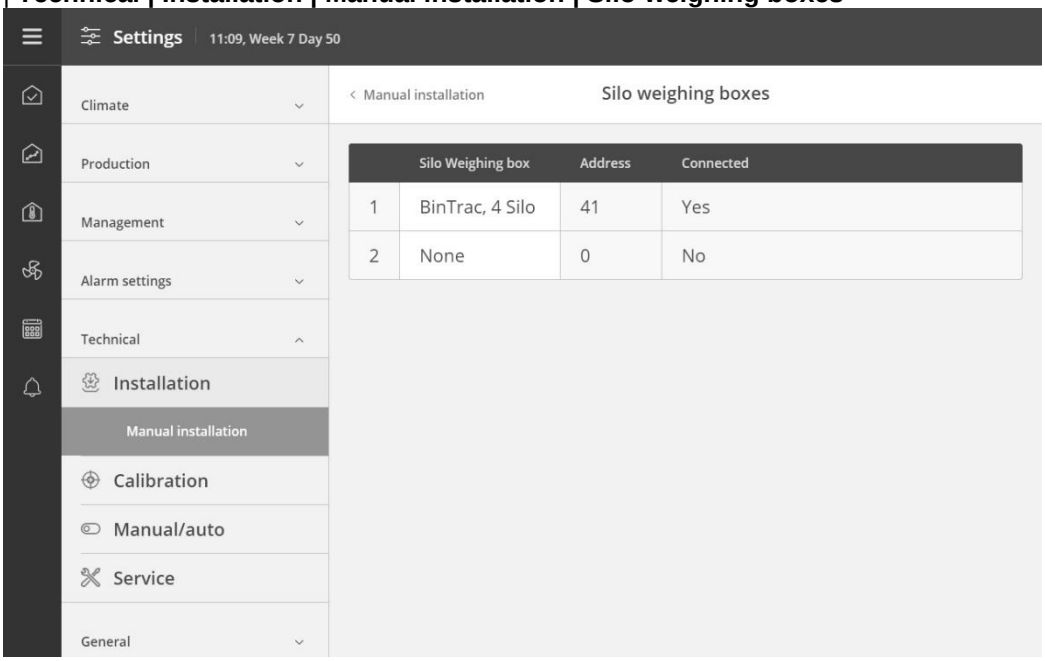
Make sure the CAN protocol is set to CANopen.

| Technical | Installation | Manual installation | CAN protocol



Here you see the CAN bus address (CAN ID) and if it is connected. Utilize address 41 for bins 1-4 and address 42 for bins 5-8.

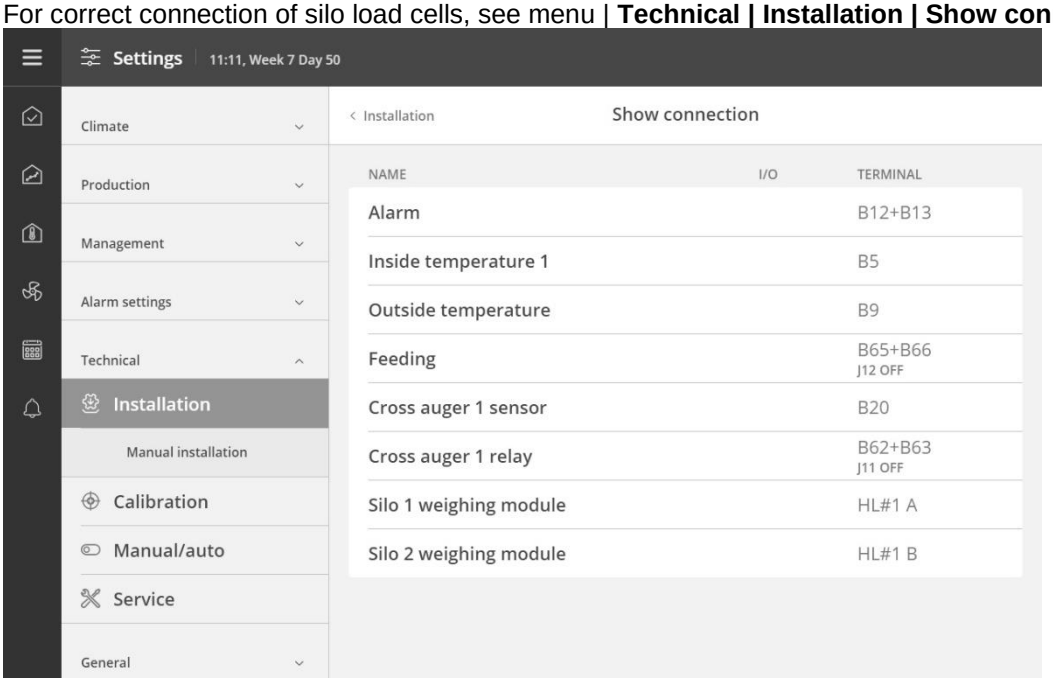
| Technical | Installation | Manual installation | Silo weighing boxes



Select the number of BinTrac bins enabled. The CAN controller supports up to 8 electronic silo weighers.

| Technical | Installation | Manual installation | Silo weighing boxes

For correct connection of silo load cells, see menu | **Technical | Installation | Show connection**



CAN Classic Setup

The following two settings must be configured when using properly on the CAN bus controller to allow for accurate weight communication with the BinTrac system.

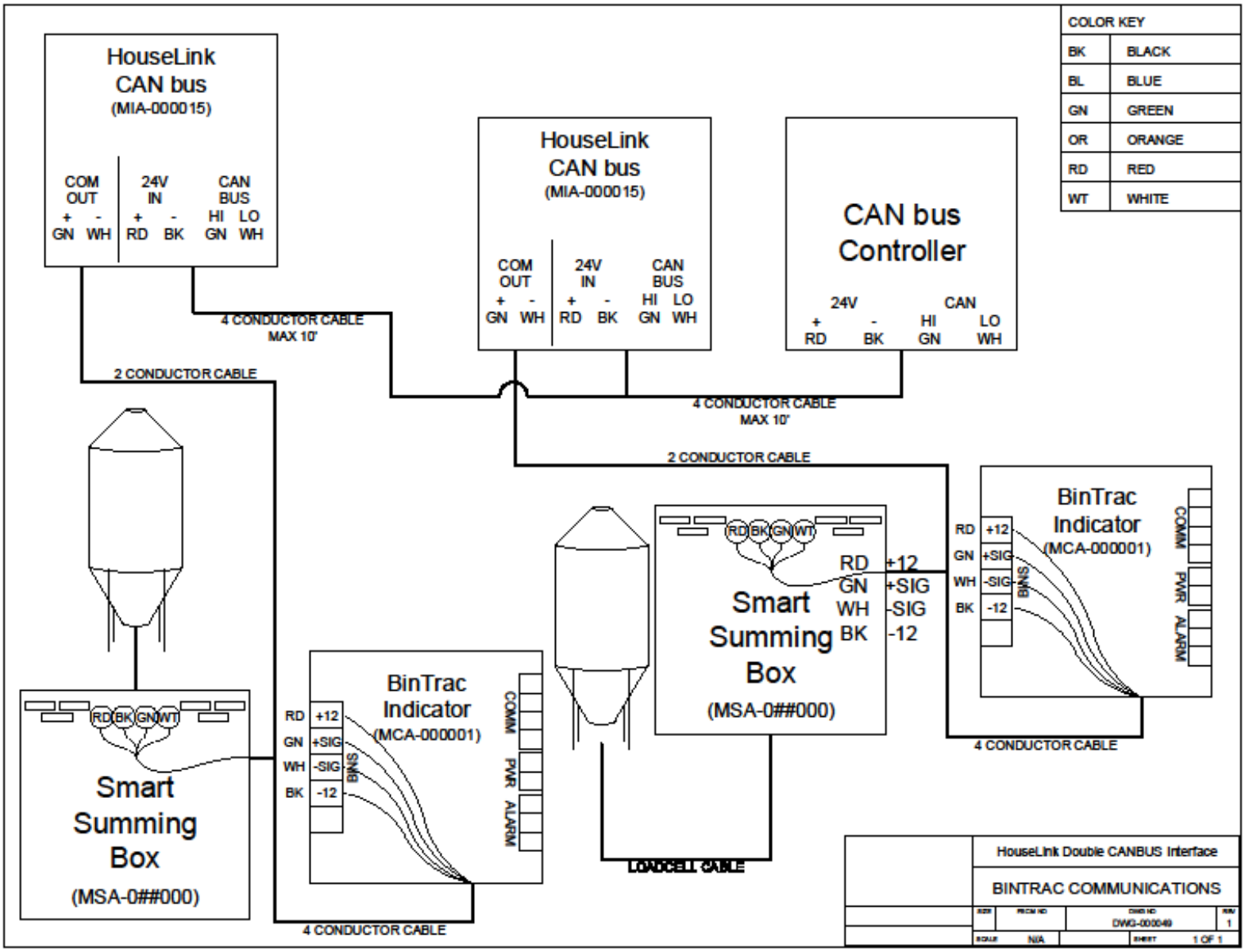
1. Set Calibration value to same value as total Load Cell Capacity setting in the BinTrac Indicator.
2. Set Offset value to “0”.

For complete installation and setup of your CAN bus controller, please consult your user manual.

Operational Specifications

CAN Bus version:	Compatible with ISO 11898 STANDARDS
Operating Temperature Range:	-40°C to +60°C (-40°F to +140°F)
Operating Voltage Range:	10.5 VDC to 27.0 VDC
Humidity:	5% to 95% (non-condensing)
Environmental Air:	No corrosive gasses permitted
Enclosure Type:	Non-Sealed
Wiring Type:	Screw terminal blocks

Wiring Diagram



EU DECLARATION OF CONFORMITY (CE)

Model Type

Model HL-10C

Name and Address of the manufacturer

HerdStar, LLC
1531 Madison Avenue
Suite 400
Mankato, MN 56001 USA

This Declaration of Conformity is issued under the sole responsibility of the manufacturer.

Object of the declaration:

Models:
HL-10C

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

Applicable Directives	Harmonized Standards or Technical Specifications
2014/35/EU Electromagnetic Compatibility Directive	EN 55032:2015/A11:2020 EN 61000-6-3: 2007/A1:2011 EN 61000-4-2: 2009 EN 61000-4-3: 2006+A1:2008+A2:2010 EN 61000-4-4: 2012 EN 61000-4-6: 2014 EN 61000-4-5: 2014
ROHS	EN 5081:2012

Signed for on behalf of HerdStar, LLC at
1400 Madison Avenue Suite 304, Mankato, MN 56001 USA
1/2/2023

Mark Jaeger
President