

BINTRAC[®]

HouseLINK HL-10A

Installation and Operation Manual




HerdStar[®]

HouseLink™ HL-10A

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1400 Madison Avenue / Suite 504 / Mankato, MN 56001

PH: 507-344-8005 FAX: 507-344-8009

www.herdstar.com

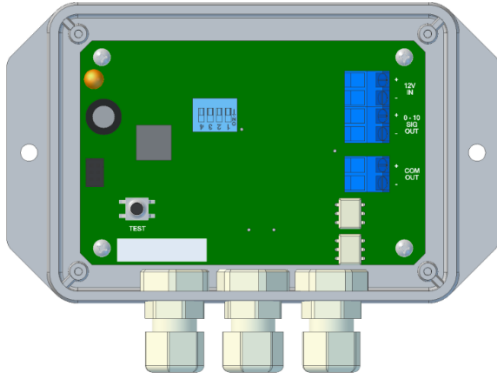
DESCRIPTION

The House Link HL-10A outputs 0-10 VDC proportional to the weight of the selected bin. The device will connect to the BinTrac® Indicator “BINS” port in parallel with the summing box. The BinTrac Indicator transmits digital weight data which is converted to a 0-10 VDC output.

INSTALLATION

The HouseLink HL-10A is designed to be used with the BinTrac Weighing system. One HouseLink HL-10A can be connected per displayed bin. (Two HL-10A max)

1. The HouseLink HL-10A should be mounted no more than 10 feet from the PLC or House Control.
2. Connect the +12 IN and -12 IN from the HouseLink HL-10A to the power supply (sold separately). Can connect two HL-10A's to one external Power Supply.
3. Connect the +COM (OUT) and –COM (OUT) from the HouseLink HL-10A to the +SIG and -SIG on the BINS side of the Bintrac Indicator.
4. Finally, with the two-conductor cable (ordered separately), connect the +0-10 SIG OUT and -0-10 SIG OUT to the corresponding INPUT of the PLC or House Control



HL-10A Interface	<i>BT200 BinTrac Indicator (BINS PORT)</i>	<i>BT260 BinTrac Indicator (BINS PORT)</i>
+COM (OUT)	+ SIG	+COM IN
-COM (OUT)	- SIG	- COM IN
HL-10A Interface	Power Supply	Power Supply
+12 IN	+12	+12
-12 IN	-12	-12
HL-10A Interface	<i>House Control/PLC</i>	<i>House Control/PLC</i>
+ 0-10 SIG OUT	+ INPUT	+ INPUT
- 0-10 SIG OUT	- INPUT	- INPUT

INSTALLATION (continued)

The unit has four dip switches that need to be set up for configuration.

The settings on the switches S1 and S2 coincide with the bin:

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	

ZERO Calibration Feature

By default, dip switch S3 is in the OFF position. This setting allows the ZERO to be tracked with the BinTrac Indicator. Setting S3 to the ON position will allow the ZERO to be tracked by the house controls.

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 approximately 10 seconds.

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. (See Below)

Bin C – Enable Weight Broadcast.

Bin D – Enable communications to peripheral devices.

This must be enabled when BinTrac Monitor is connected to: BinTrac Remote Display or HouseLink HL-10A.

1. Press the BIN key to select the desired configuration option.
2. Use the UPPER or LOWER keys to enable or disable options.

STATUS LED OPERATION

The LED will flash three different ways dependent upon how the unit is operating.

SLOW FLASH – This indicates the unit is communicating and operating normally.

FAST FLASH – This means 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

Once the unit is wired and the dip switches are set up correctly, the unit can be put into one of five test modes. These modes are useful when setting up and testing with the house controls.

Test 1 – Press the Test button on the board once and the unit will output 0.4 VDC.

Test 2 – Press the Test button on the board twice and the unit will output 1 VDC.

Test 3 – Press the Test button on the board three times and the unit will output 5 VDC.

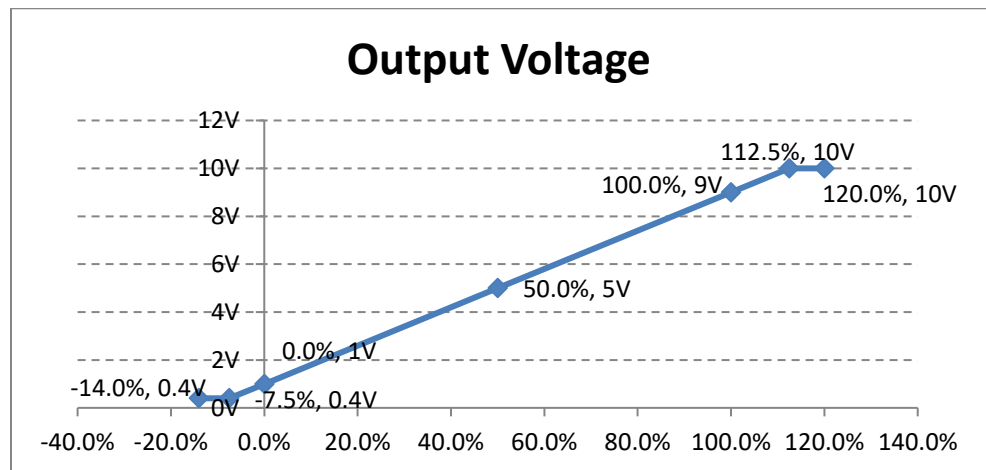
Test 4 – Press the Test button on the board four times and the unit will output 9 VDC.

Test 5 – Press the Test button on the board five times and the unit will output 10 VDC.

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

OUTPUT SPECIFICATION

The displayed weight is relative to the output voltage from the HouseLink HL-10A. The chart below outlines the percentage of the total weight based on the output voltage.



Percent	Output Voltage
120.0%	10V
112.5%	10V
100.0%	9V
50.0%	5V
0.0%	1V
-7.5%	0.4V
-14.0%	0.4V

Operational Specifications

Operating Temperature Range:	-40°C to +60°C (-40°F to +140°F)
Humidity:	5% to 95% (non-condensing)
Wiring Type:	Screw terminal block
Power Requirements:	11.5 VDC - 13.5 VDC, 40 mA (typical)
Output Signal Range:	0.4 VDC to 10.0 VDC
Allowed Load Type:	Grounded
Default Output Value:	0.4 VDC
Minimum Load Resistance:	2,000 Ohms
Maximum Load Capacitance:	1 Microfarad
Maximum Output Error @25°C:	+/- 20 mV (0.2% of full-scale)
Zero Accuracy:	+/- 10 mV
Span Accuracy:	+/- 0.05% of reading
Linearity Error:	+/- 0.02% of full-scale
Span Temperature Stability:	+/- 3 ppm/°C
Output Signal Resolution:	152 microvolts
Output Signal Ripple:	75 microvolts
Output Signal Protection:	Yes
Serial Communication Interface Type:	HerdStar optical iso (proprietary)