

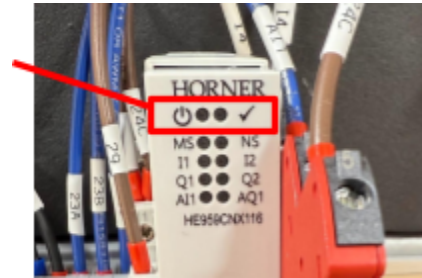
# Troubleshooting the 03-061005 Remote I/O Module

## 1. Check the Power to Remote I/O Test

Check that the Remote I/O Module has power going to it.

The top two LEDs should both be on to indicate that power is coming to the module, and the self test has passed, unit is active

Power comes from the bottom two wires at the base of the module.

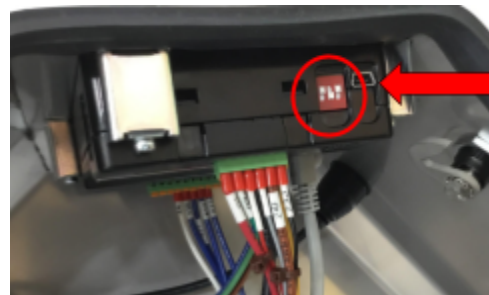


## 2. Check hardware settings on controller

Make sure that the center dip switch is turned on. Locate the red square with white buttons on the side of the controller.

White switches #1 and #3 should be in the off position (closest to the front of the controller).

The center switch #2 should be in the ON position - closest to the back of the controller.



Check CAT-5 connection to controller

- Make sure the cable is connected into the CAN port

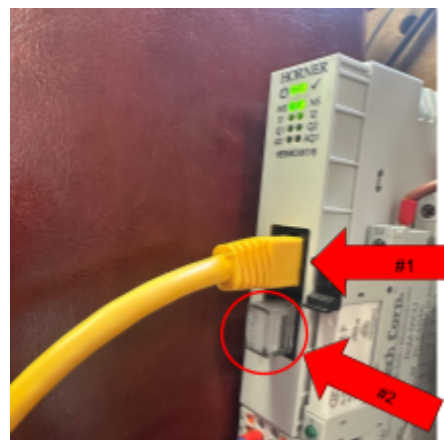


Check CAT-5 connection to Remote I/O Module

- Make sure the other end of the cable is connected to the top one of the two ports on the Remote I/O Module

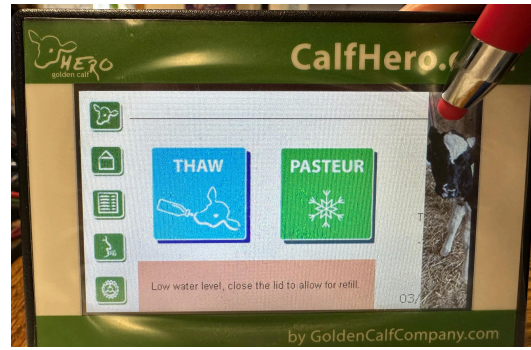
Check termination at Remote I/O Module

- Make sure that the bottom of the two ports on the Remote I/O Module has a terminating connector inserted.

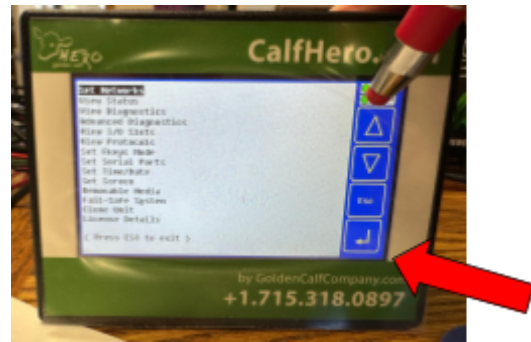


### 3. Check Software Network Settings on Controller

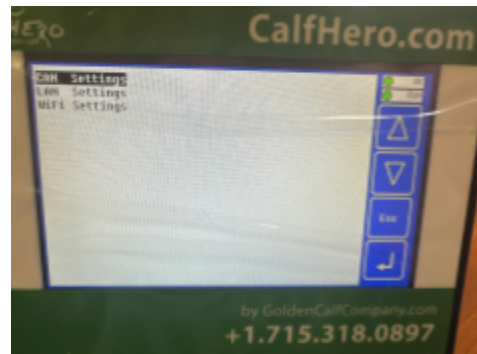
Reveal the hidden menu by tapping the upper right hand corner.  
Then tap just above the calf's head to reveal a systems menu



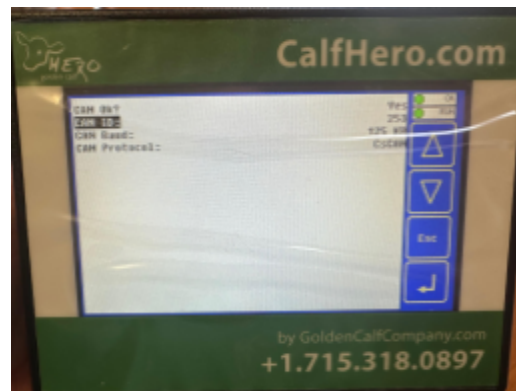
Select Set Networks by pressing the “return button”



Select CAN settings

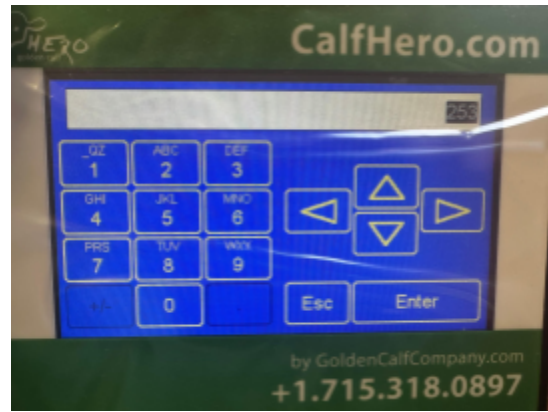


Double check the CAN ID.  
The CAN ID should read 253.

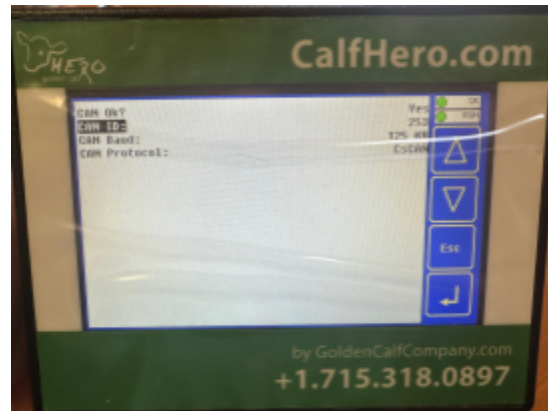


If the CAN ID doesn't read 253, press the "return" button and enter the correct numbers.

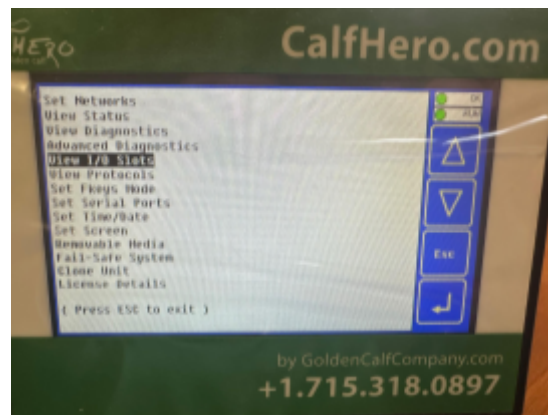
Note: check your software version (Settings>About Calf Hero), this is a known error fixed in 5.05 software. If you have earlier version, please, reach out to [support@goldencalfcompany.com](mailto:support@goldencalfcompany.com) to get a software upgrade



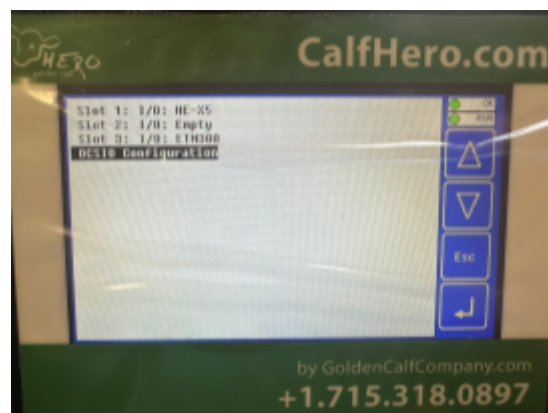
Press ESC to return to the systems menu



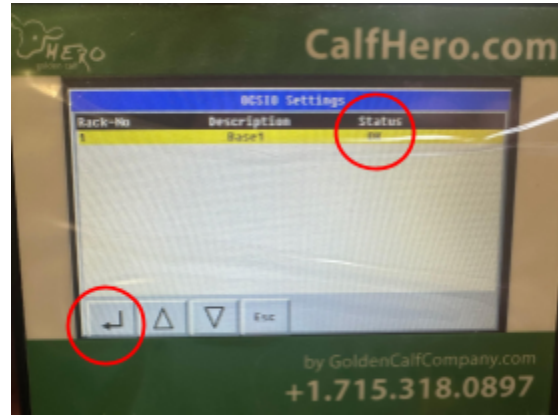
In the Systems Menu select View I/O Slots, press return



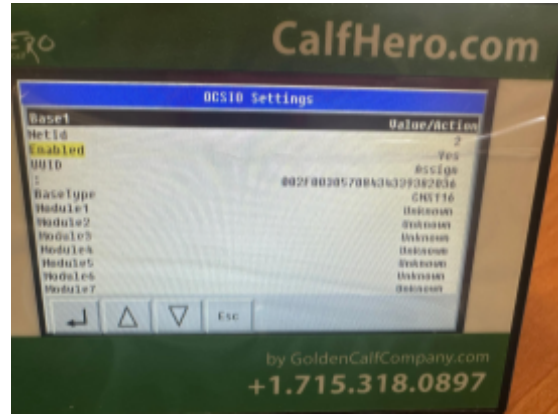
Select OCSIO Configuration



Review the status,  
Select line item 1, then press the return key



Check NetID, in software versions 5.05 and higher, it should read #2.  
In software versions up to 5.04 it will read 1. - please contact [support@goldencalfcompany.com](mailto:support@goldencalfcompany.com) to update your software version




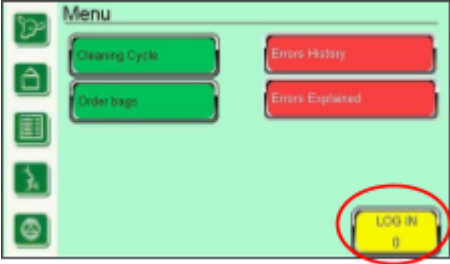

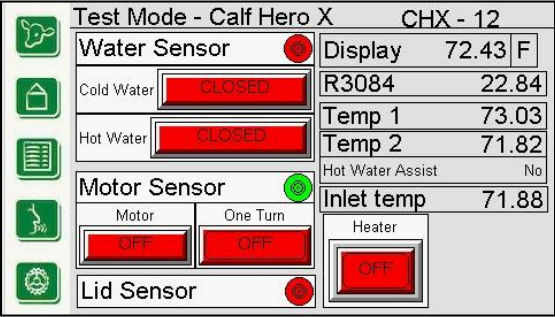
Press ESC to return to systems menu, then press ESC again to return to Calf Hero home screen.

#### 4. Check the Communication to Remote I/O Test

The MS & NS LEDs should also be on. If not use the table to troubleshoot.

Status	LED Indicators			
	Power	OK (✓)	MS	NS
V+ Power Applied	ON	ANY	ANY	ANY
Self-Test FAIL	ON	ANY	OFF	ANY
Self-Test PASS	ON	ON	ANY	ANY
Network Normal	ON	ON	ON	ON
Duplicate Net ID	ON	ON	ON	OFF
Configuration Mismatch	ON	Flash (1Hz)	ON	Flash (1Hz)
OCS Stop Mode/Communication Timeout	ON	ON	ON	Flash (1Hz)
OCS Run Mode	ON	ANY	ANY	ANY
Onboard I/O Fault	ON	OFF	ON	ON
Invalid Dynamic Configuration	ON	Flash (1Hz)	ON	ON
Power Up/Waiting to be Configured	ON	ON	Flash (1Hz)	Flash (1Hz)

## 5. Test inputs outputs from the controller to Remote I/O Test

<p>Start by pressing the <b><u>Calf Head Menu Button</u></b></p>																																													
<p>Press the <b><u>Log In</u></b> button and enter 2000</p>																																													
<p>This will bring you to the Technician Menu, select <b><u>Test Mode</u></b>.</p>																																													
<p>The Test Mode Screen allows you to isolate the performance of individual components. You can also monitor individual temperatures. Inlet Temp is best used for identifying whether or not Cold and Hot water are connected to the proper valves.</p> <p><b>Note:</b> HEATER only turns on if the water level sensor is engaged</p>	 <table border="1" data-bbox="862 1350 1414 1665"> <thead> <tr> <th colspan="2">Test Mode - Calf Hero X</th> <th colspan="2">CHX - 12</th> </tr> </thead> <tbody> <tr> <td>Water Sensor</td> <td><input checked="" type="checkbox"/></td> <td>Display</td> <td>72.43 F</td> </tr> <tr> <td>Cold Water</td> <td><input type="checkbox"/></td> <td>R3084</td> <td>22.84</td> </tr> <tr> <td>Hot Water</td> <td><input type="checkbox"/></td> <td>Temp 1</td> <td>73.03</td> </tr> <tr> <td></td> <td></td> <td>Temp 2</td> <td>71.82</td> </tr> <tr> <td></td> <td></td> <td>Hot Water Assist</td> <td>No</td> </tr> <tr> <td>Motor Sensor</td> <td><input checked="" type="checkbox"/></td> <td>Inlet temp</td> <td>71.88</td> </tr> <tr> <td>Motor</td> <td><input type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>One Turn</td> <td><input type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>Heater</td> <td><input type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>Lid Sensor</td> <td><input checked="" type="checkbox"/></td> <td></td> <td></td> </tr> </tbody> </table>	Test Mode - Calf Hero X		CHX - 12		Water Sensor	<input checked="" type="checkbox"/>	Display	72.43 F	Cold Water	<input type="checkbox"/>	R3084	22.84	Hot Water	<input type="checkbox"/>	Temp 1	73.03			Temp 2	71.82			Hot Water Assist	No	Motor Sensor	<input checked="" type="checkbox"/>	Inlet temp	71.88	Motor	<input type="checkbox"/>			One Turn	<input type="checkbox"/>			Heater	<input type="checkbox"/>			Lid Sensor	<input checked="" type="checkbox"/>		
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<p>I1 - lid sensor I2 - motor sensor Q1 - Cold water valve Q2 - hot water valve AI1 - open AQ1 - motor - engage</p>	