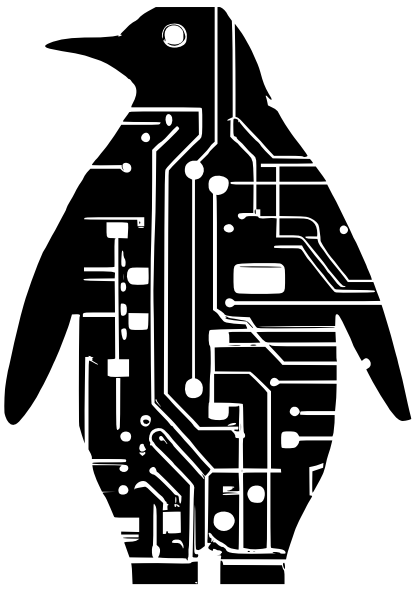
STREAM SENDER USER GUIDE

Version 3



Brandco Connected
February 2025

Contents

Basics 2
Power 2
Charging 2
Sensor connections 3
Removable pressure sensor connections 3
Pressure sensors 3
Measure flow from pressure 4
Flow device config 4
Accessing internal controls 5
Change the node address 6
Node address options: 6
Device group ID's 7
Setting Device Group 7
Option 1 - Use the display 7
Option 2 - Use the hardware button 7
Radio range settings 8
Setting radio range 8
Option 1 - Use the display 8
Option 2 - Use the hardware button 8
Troubleshooting 9
Error status lights 9

Basics

Learn how to power and charge

Power

There is only one external button located on the top of the unit by the antenna.

1. Press the power button, and the power status led will light green to indicate on. Wait 2 seconds for self checks to complete. Status light will flash green once when complete.
2. Normal operation starts and status light will flash blue while pressure is being transmitted.
3. To turn off press the power button again.

Charging

To charge connect the charge cord to a USB power adapter and place the circle end by the charge port. It will magnetically attach itself. The charge light will light orange while it charging and turn off when it is fully charged.

Sensor connections

Removable pressure sensor connections

Pressure sensors

There are 4 pressure sensor connectors on the bottom of the unit labeled PSI1, PSI2, PSI3 & PSI4. These connectors correspond to the numbered pressure transducer.

You can remove the pressure sensor connection if needed by turning the circular end of the cord connector counter-clock wise. When it is all the way loosened, pull the connection straight out to remove it.

If you remove and reinstall the sensor connections, take care to attach the pressure transducer to its corresponding numbered port.

All sensors have variation. When the unit is factory calibrated, this variation is taken into account for each port and stored. The Sender uses this to compensate for variation to achieve high accuracy.

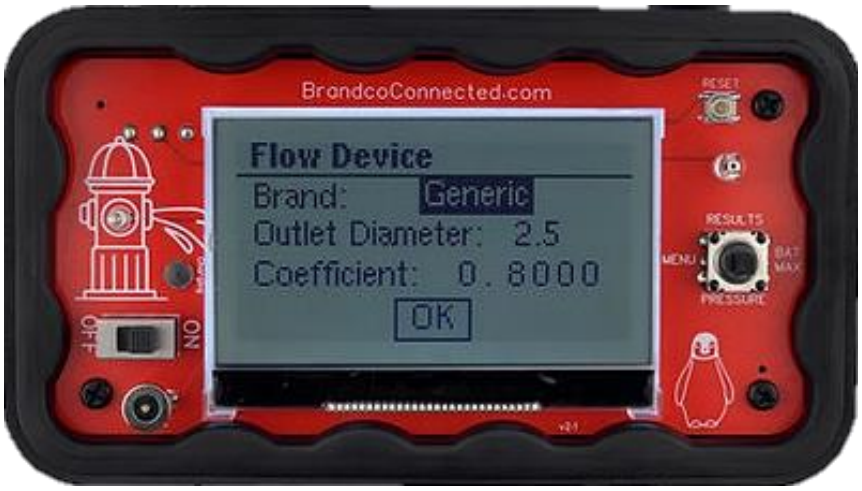
To reinstall, ensure the connector is aligned with the pins. It can only be inserted one way. Push it in until the threads can engage and turn the connector end clockwise to thread the connector on finger tight.

Measure flow from pressure

Configure your display for your flow device type

Flow device config

You must enter information about your flow device for the display to calculate GPM from the pressure. This information should be obtained from the data sheet for your specific flow device.



Remote display flow device config screen

Enter the display menu system and scroll down to Flow Device Config. Center press the joystick to select the option. Use left/right to scroll to the field and center press to select it.

- Brand: Select the manufacture from the drop down list. Some manufacture's use a correction factor for large outlet diameters such as 4". The display will use this correction if required. If the manufacture is not listed, use the Generic selection.
- Outlet Diameter: Select the flow outlet diameter from the drop down list.
- Coefficient: Enter the coefficient for your specific device from the manufacture data sheet.

The display uses this information for every Steam Sender sensor. For GPM to be calculated accurately, each sensor must be connected to the same type of device with the same flow criteria. You cannot mix and match and connect one sensor to a 4" outlet and the other three to 2" outlets. You cannot use an orifice reducer in only one flow device.

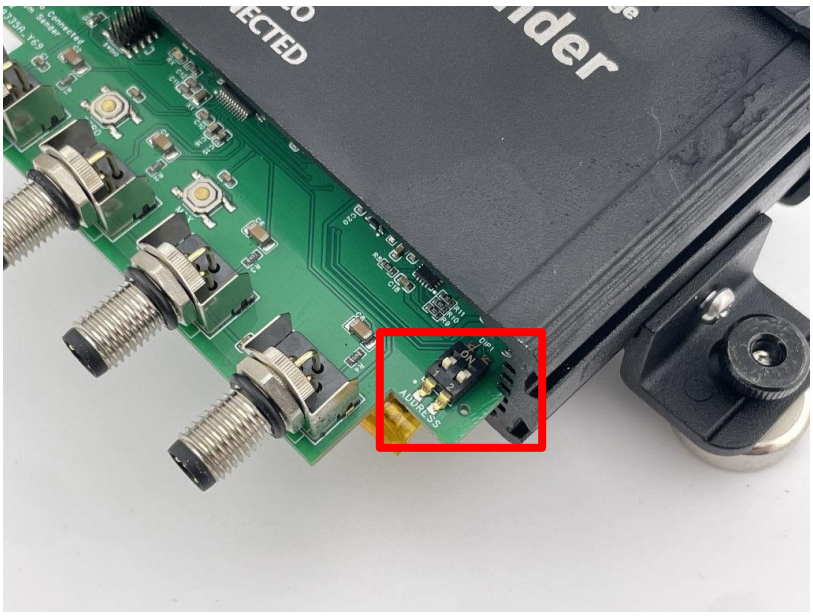
Accessing internal controls

1. Unscrew the sensor cords and pull straight out to remove them. Remove the nuts on the sensor connectors using a 11mm socket.
2. Remove the black endcap by unscrewing the 4 screws. Screws are self-retaining in the endcap so loosen one halfway until you feel resistance then move to the next. Continue until they are fully removed.
3. Slide the circuit board out 1/2” to see the buttons.

Change the node address

For using two or more senders

Senders ship with the node number set to 1. Each device must be set to a different number for the display to recognize them separately.



Use the address dip switch at the right corner of the board to change the address if the sender is a 2nd unit.

Tip: Use a pointy object like a pen to flip switches easier.

Node address options:

- Node 1 - selector 2 down
- Node 2 - selector 2 up

Device group ID's

Understand different group numbers

Setting Device Group

Group ID's are the way to limit communication between multiple sets of Sender/Display sets. Devices will only communicate with other devices that have the same Group ID number. Senders and Displays have a default Group ID set to 1. If you have multiple sets and do not want them to talk to each other, set a different ID on each set.

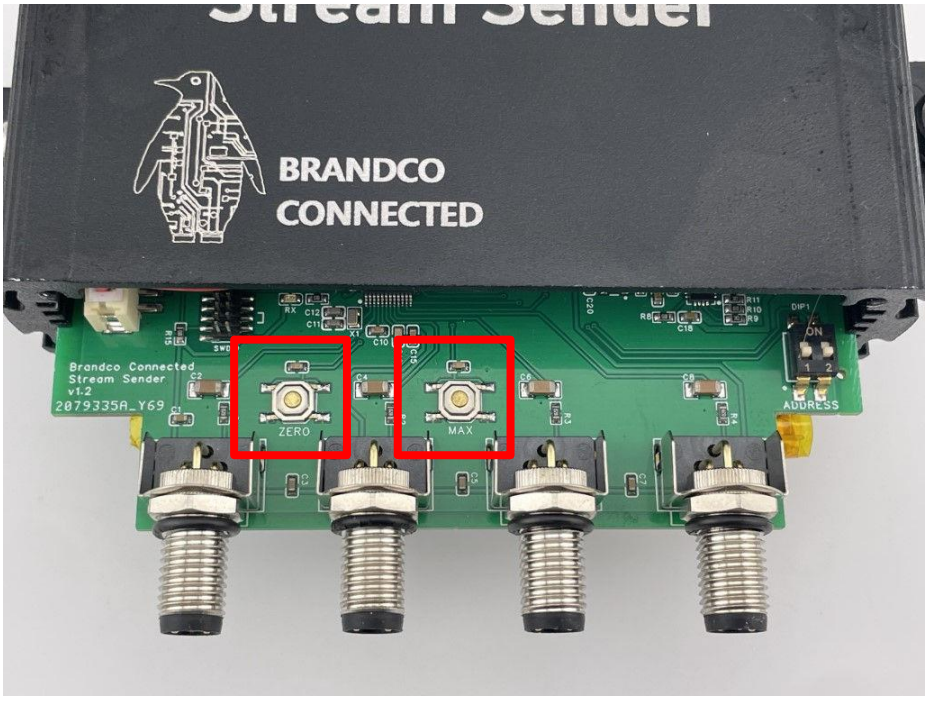
Option 1 - Use the display

The remote display can set Group ID's on connected nodes and is a simpler method. Refer to the display guide on setting Device Group ID's for more information.

Option 2 - Use the hardware button

See section on Accessing internal controls to gain access to hardware buttons.

1. With endcap removed, reconnect suction/discharge pressure sensors and power on.
2. Click the MAX button to increase the Group ID number by 1. The status light will flash yellow the number of the group. For example, pressing once will change to group 2 and the light will flash two times.
3. Once you reach group 8, it will restart back at group 1.
4. Press and hold the MAX button for 1 sec to save your changes.
5. Release the button when the status light flashes green to confirm it is saved.



Radio range settings

How to increase range if needed

Setting radio range

Senders ship with the range set at normal which is 800' with out obstructions impeding the signal. It can be increased for special case scenarios that need additional distance.

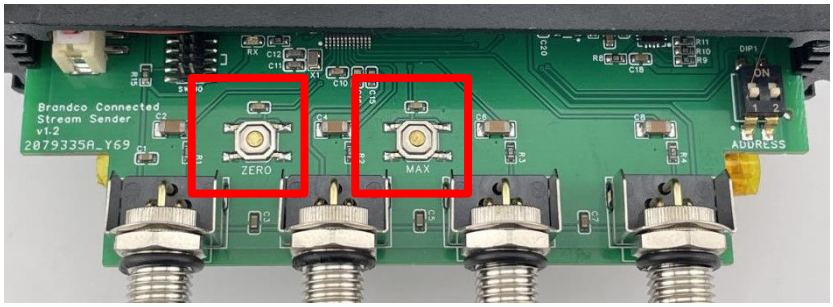
Option 1 - Use the display

The remote display can set radio range on connected nodes and is a simpler method. Refer to the display guide on setting radio range for more information.

Option 2 - Use the hardware button

See section on Accessing internal controls to gain access to hardware buttons.

1. Click the ZERO button to increase to the next higher level setting. The status light will flash yellow to indicate the range setting you are on (one flash = level 1, two flash = level 2, ...). Once you reach the highest level setting the next press will be back to the start at normal.
2. Press and hold the MAX button for 1 sec to save your changes.
3. Release the button when the status light flashes green to confirm it is saved.



Range distance and transmission rate chart:

Range	Transmit rate	Notes
800'	3 times per second	
1400'	2 times per second	
2000'	Once every 2 seconds	Reset display after setting
3000'	Once every 3 seconds	Reset display after setting

***Important**: Display unit and Sender MUST have the same setting to communicate*

Troubleshooting

Learn what the status light is trying to say

On powering up the system performs self checks. This takes about 1 second. When complete the status light will turn green briefly before beginning to transmit pressure.

Error status lights

Status blinks yellow/orange 3 times – low battery voltage. The battery is too low for proper operation. It will take approximately 8 hours to fully charge the battery from this condition.

Status blinks red at start - sensor is not detected. Check your sensor cord connection and restart.

If sensor 1 (PSI1) is not detected it will flash red once then repeat.

If sensor 2 (PSI2) is not detected it will flash twice quickly then repeat.

Try the following to ensure a good connection:

- Over tightening the connector is a common cause of sensor failure. Loosen the connector a half turn and restart the unit to see if the issue continues.
- Disconnect the cord from the body by unscrewing the quick connect. Check the cord end for damaged wires. If it looks good, reinsert and screw back in finger tight.
- Check the transducer. Did the screw on top come loose? Any wire damage?

If there is any wire damage causing the issue, please contact us and a new cord will be sent to replace it. It's a simple 1 screw and 30 seconds to swap it out.

If there is no obvious damage it is likely it will need returned for repairs. Please use the support form or email for a replacement.