BRASCH
ENVIRONMENTAL TECHNOLOGIES

Gen 2 Remote Transmitters

Quick Start Guide

Brasch Environmental Technologies, LLC
140 Long Road, Suite 101
Chesterfield, Missouri 63005
314-291-0440
www.braschenvtech.com

Quick Start Guide

Please read this entire manual before attempting to install and operate this remote transmitter. This guide is only intended to provide the basic steps necessary for installation and operation. Each step will reference the portion of the manual where more complete information can be obtained.

Step 1 – Mounting

Determine the location for mounting your transmitter(s). The location(s) may be indicated on the architectural drawing. Also, the owner or designer of the facility may be consulted. Mounting guidelines can be found on page 12 of the manual.

Step 2 – Power Wiring

WARNING

This transmitter may require the use of voltage levels high enough to cause fatal injuries. Proper procedures must be followed any time work is performed on this unit.

Only qualified personnel should attempt to install, maintain, or service this equipment.

Provide a dedicated circuit at the required 24 VAC or 24 VDC at each transmitter mounting location. Follow all national and local wiring codes. The wiring should be at least 18 AWG. The circuit must include a disconnect switch located within easy reach of the transmitter or controller.

CAUTION

Operating this transmitter with the incorrect voltage and power requirements can cause internal electrical components to overheat and fail. Operation with the wrong power requirement will void the manufacturer's warranty and the installer will be responsible for any damage that occurs.

Contact Brasch Environmental Technologies, LLC before connecting power to the transmitter if you are unsure of the correct power requirement.

Step 3 – Communication Wiring

The transmitter conveys its sensor signal over two wires. Use a two-conductor shielded twisted pair (STP) cable of at least 24 AWG for each transmitter in the system.

> Note
>
> Ensure that the signal connections between each transmitter and between the transmitters and any controllers are correct. If the connections are wired incorrectly, the transmitters will be unable to communicate.
>
> Use a cable with color-coded conductors and make sure that the same conductor connects to the same terminal on each transmitter and the controller.

Multiple remote transmitters, regardless of gas type, should be connected in a daisy chain pattern. All transmitters share the same conductors back to the controller. Ensure the communication wires are a twisted pair and shielded from the power conductors. A single cable may be used for both power and communication provided it has the proper internal and external shielding. On the transmitter farthest from the controller, enable the RS-485 termination resistor (SW3) to reduce signal reflections.

See figures 1 and 2 on page 18 of the manual for wiring diagrams.

Step 4 – Analog Output Wiring

Each sensor is equipped with a proportional output that generates a 4-20 mA, 2-10 VDC, 1-5 VDC, or 0.2-1 VDC signal. This signal is proportional to the concentration of target gas present at the sensor and may be used for monitoring gas or for controlling a VFD. Not all systems will accept this signal directly and may need an intermediary controller. The zero offset may be disabled via the selection DIP switch if desired.

Step 5 – Applying Power

Once you are sure that the wiring connections are correct, apply power to the transmitter circuit. When power is first applied, the green power indicator will glow, indicating the transmitter is active. The unit will begin a 90-second warm-up before taking any gas measurements and providing meaningful outputs.

See page 17 of the manual for more information concerning the initial startup.

At this point, the transmitter is now ready to monitor for the presence of the target gas.

Warranty Statement

Brasch Environmental Technologies, LLC warrants gas transmitters, gas detectors, control panels, and accessories for a period of two years from the date of shipment against defects in material or workmanship. Should any evidence of defects in material or workmanship occur during the warranty period, Brasch Environmental Technologies will repair or replace the affected product, at its own discretion, without charge. The company shall not be held responsible for any charges incurred with removal or replacement of allegedly defective equipment, nor for incidental or consequential damages. If any equipment has not been installed per Brasch instructions, this warranty is void. The cost to repair, replace, or service any component is not the responsibility of Brasch. Any replacement parts or service necessary must be paid in full prior to shipment or performance.

Typical Installation Diagrams

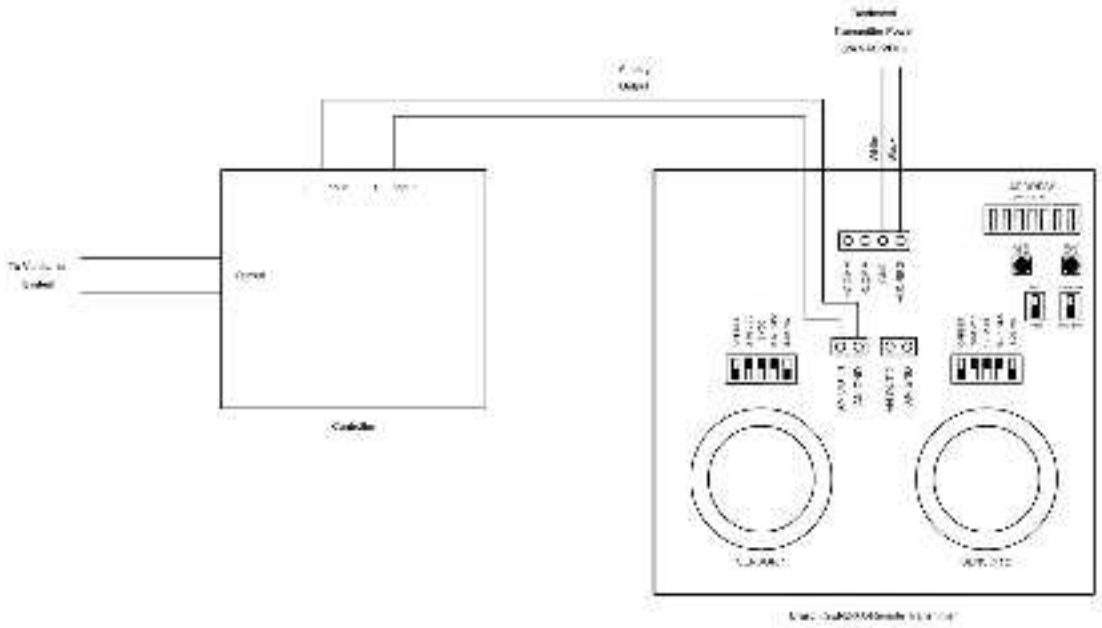

Figure 1: Wiring – Analog Output Configuration

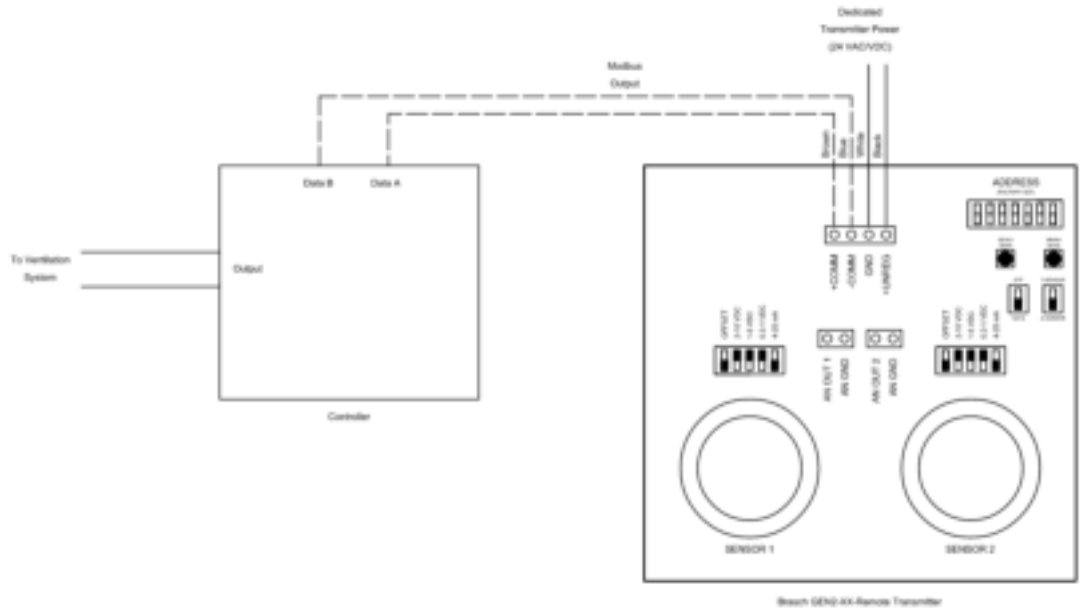

Figure 2: Wiring – Digital Output Configuration

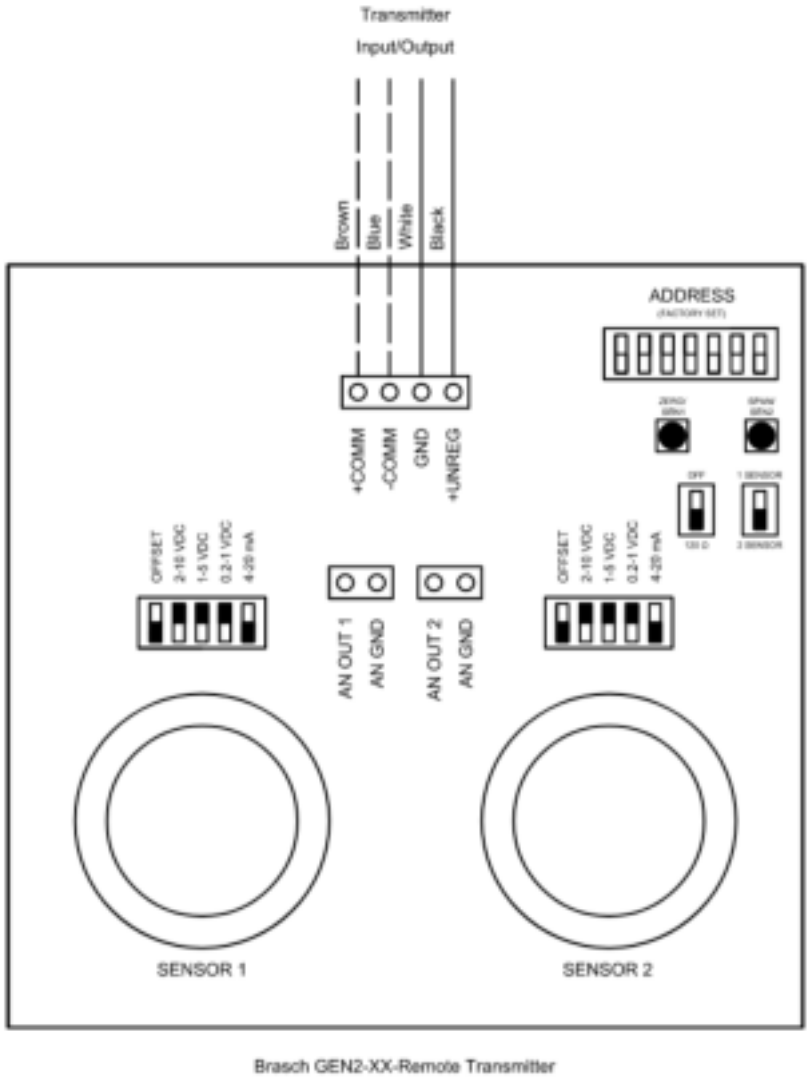

Figure 3: Wiring – Remote Transmitter to GSE Generation 2/GDCP-Touch

BRASCH
ENVIRONMENTAL TECHNOLOGIES

140 Long Road, Suite 101
Chesterfield, Missouri 63005

General Contact Information

Phone: 314-291-0440
Fax: 314-291-0646
Email: customerservice@braschenvtech.com
Website: www.braschenvtech.com

Technical Support Contact Information

Phone: 314-291-0440 Option 2
Fax: 314-291-0646
Email: support@braschenvtech.com
Website: www.braschenvtech.com/support-for-existing-systems

Revision: 2.0
Issue Date: July 30, 2024
Document Number: SG03
© Brasch Environmental Technologies, LLC
All Rights Reserved