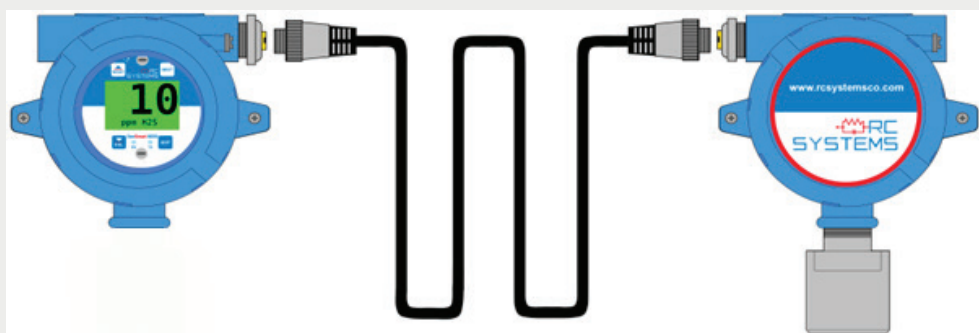


Remote Sensor *SenSmart* 6000

Installation Guide



Flammable & Toxic Gas Detectors
Smart Alarm Controllers
Fire & Gas System Engineering
Technical Service & Support



Warning: Read & understand contents of this manual prior to operation. Failure to do so could result in serious injury or death.

GETTING STARTED

Gas Detector Installation and Power-up

1

What you need (not included)

1. Small Flathead Screwdriver
2. Phillips Screwdriver (for poly enclosure)
3. Wire (*RC Systems recommends: Belden 3124A Multi-Conductor wire or equivalent.*)

2

Installation of Gas Detector

Remove windowed lid from unit.

1. AL Enclosure -
 - a. Loosen lid set screw
 - b. Rotate lid clockwise and remove
 - c. Loosen thumb screws on display to remove display and access terminals
2. PY Enclosure -
 - a. Unscrew lid screws (4) to access terminals.

SenSmart 6000 wiring

1. Connect 10-30VDC power lead to TB1.1. **(See Figure 1)**
2. Connect Common (ground) lead to TB1.4 **(See Figure 1)**

FOR ANALOG OUTPUT:

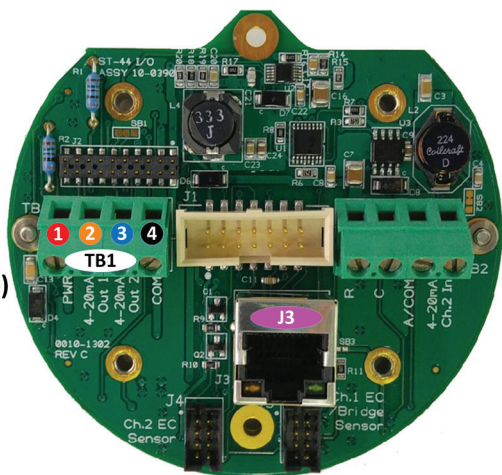
3. Connect signal lead to TB1.2. (Channel 1) and/or TB1.3 (Channel 2) (4-20mA Out) **(See Figure 1)**

FOR ETHERNET OUTPUT:

4. Connect Ethernet cable to J3. (Ethernet output) **(See Figure 1) (optional)**
(By default, DHCP is enabled on the transmitter, allowing the device to be discovered by its IP address.)

Figure 1

- TB1. **1** – 10-30VDC Positive(+)
- TB1. **2** – CH.1, 4-20mA Output
- TB1. **3** – CH.2, 4-20mA Output
- TB1. **4** – 10-30VDC Common (-)
- J3** – Ethernet Connector



REMOTE SENSOR INSTALLATION

SenSmart 6000 Remote Wiring Instructions

4

Follow the steps below to first connect the SenSmart 6000 I/O Board to the Remote Sensor:

1. Verify SenSmart 6000 is powered off.
2. Remove lid from SenSmart 6000 and remote sensor
3. Connect (24V) TB1.1 on the Remote sensor board to the 10-30VDC power supply on SenSmart 6000 I/O board (TB1.1). (Either double up wires on TB1.1 or connect to the shared power supply (TB1.1). **(Figure 2)**
4. Connect 10-30VDC Ground (GND) (TB1.2) wires to power terminal COM (TB2.2). **(Figure 2)**
5. Locate the 10-0388 relay board. *(This board is “piggybacked” behind the 10-0387 SenSmart 6000 CPU/Display Board.)*
6. Connect Modbus Terminal A (TB1.3) from the remote sensor board to terminal A1 on the Relay Board (TB1.1). **(Figure 2)**
7. Connect Modbus Terminal B (TB1.4) from the remote sensor board to terminal B1 on the Relay Board (TB1.2). **(Figure 2)**
8. Confirm Power up of remote sensor board by restoring power to SenSmart 6000 (3 small leds on remote sensor board will flash briefly to indicate power is on.)

REMOTE SENSOR INSTALLATION

Connecting to the Remote Sensor

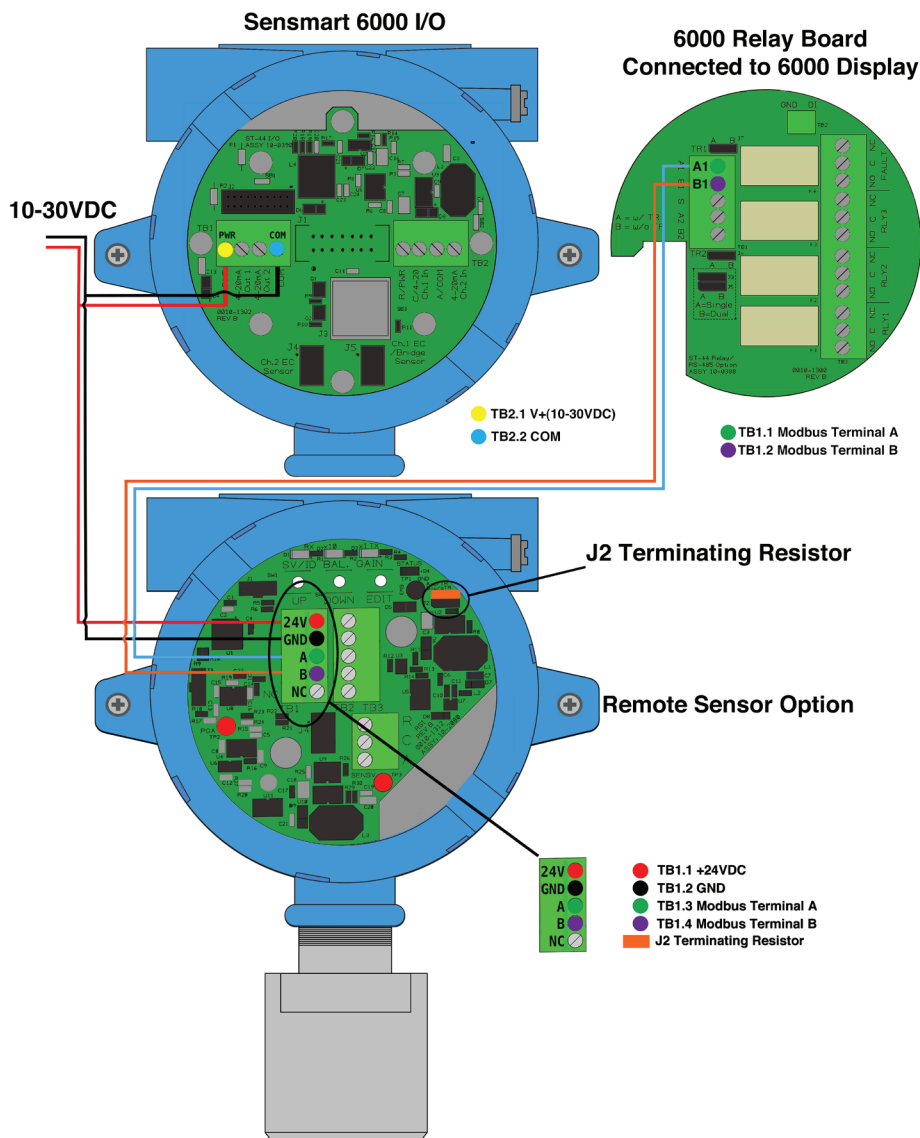
5

Terminating Resistors:

If using a single remote sensor the terminating resistor jumper should be placed in position A on the remote sensor board (J2) and the sensor transmitter (TR1) by lifting and repositioning.

If using two remote sensors on a single comm port (daisy chained), the remote sensor installed closest to the transmitter should have the terminating resistor jumper in position B, and the remote sensor furthest from the transmitter should have the terminating resistor jumper in position A.

Figure 2 - Remote Sensor Power Up



CONFIGURATION

Configuration Instructions

6

Important:

When configuring your remote sensor, ensure both the sensor transmitter and the 10-2080 Remote Sensor Option are readily accessible, as some steps require actions to be performed in a timely manner.

When configuring a remote sensor for the SenSmart 6900 DUAL transmitter, be sure to configure Channel 2 first.

7

Entering Configuration Mode:

From the Transmitter (SenSmart 6000):

1. Swipe Edit on the transmitter using a magnet.
2. Swipe Down until Comm Settings is highlighted.
3. Swipe Edit to enter the Comm Settings menu.
4. Swipe Edit to enter the Comm 1 Settings menu.
5. Swipe Edit until display shows Remote Sensor.
6. Swipe Down to highlight Board Setup.
7. Swipe Edit to enter Search mode.

At the Remote Sensor:

Hold Edit Button on 10-2080 Remote Sensor Option Board until the Board Setup Menu is displayed on the transmitter. LED (SV/ID) will fade in and out on remote board. **(Figure 3)**

Remote Option Board Configuration from the Transmitter: Transmitter (SenSmart 6000):

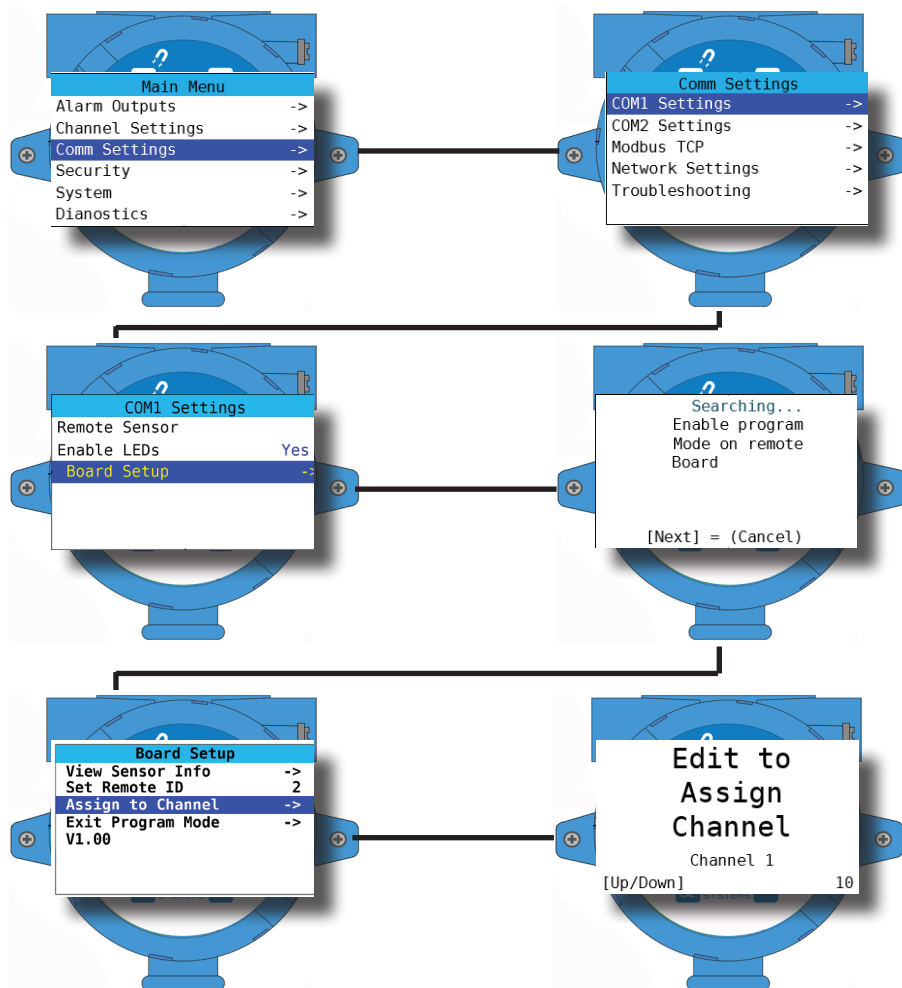
Note: When configuring a remote sensor for the SenSmart 6900 DUAL transmitter, be sure to configure Channel 2 first.

1. Highlight Set Remote ID on transmitter.
2. Swipe next until you reach the third digit. Swipe edit, set to 1 by swiping up and down buttons. Swipe Edit to save Remote ID settings. (Remote ID 2 for Channel 2 and Remote ID for channel 1.
3. Highlight Assign to Channel.
4. Swipe Edit to enter Channel Assignment Screen.
5. Swipe Up/Down to cycle between Channel 1 and 2 until desired channel is displayed (Channel 1 for Remote ID 1, Channel 2 for Remote ID 2).

6. Swipe Edit to assign the selected channel to the Remote Option Board. (warning will appear "this will modify channel config" Swipe edit to select OK).
7. Highlight Exit Program Mode.
8. Swipe Edit to exit program mode.

If using two Remote Sensor Option Boards, repeat the above configuration steps for Channel 1.

Figure 3 - Configuration Mode



Finalize Installation

1. Replace display and tighten thumb screws.
2. Replace enclosure lid.
3. Apply power to unit and observe power up screen.
4. After the warm up period, observe gas type and gas concentration on screen.
5. Using the magnet wand, swipe Down Key on the display. Follow on-screen prompts to perform calibration.



R.C. Systems provides 24/7 superior technical support from experts right here in our local facility.

If you are in need of any assistance during the setup of this product, you may contact our main office and your call will be directed appropriately.

At R.C. Systems we are proud to supply quality products and are happy to help if you have any questions or concerns.

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