Quickstart Guide

GASMAX II Gas Monitor with Remote
Photoionization Detector (PID) Sensor

GDS Corp
Gas and Flame Detection

INSTALLATION

IMPORTANT - *Before installing the GASMAX II,
make sure no toxic or combustible gases are
present. Declassify the area if necessary.*

Air movement by fans, wind, gas density,
convection, emission sources and environmental
variables should be taken into account when
determining location. As with all sensors, the
GASMAX II should be protected from falling or
directed water, snow, shock, vibration and dirt.

Use installation practices approved for the
appropriate area classification. When installed with
#10-0247 Stainless Steel sensor head, the
GASMAX II is certified for use in areas rated Class
1, Div 1, Groups B, C & D.

WIRING & INITIAL SETUP

Access the GASMAX II display assembly by
unscrewing the explosion-proof cover and
loosening the two thumbscrews. The power supply
board is attached to the rear of the enclosure.
Connect the GASMAX and remote sensor as shown
using shielded cable. Ground the shield on one end
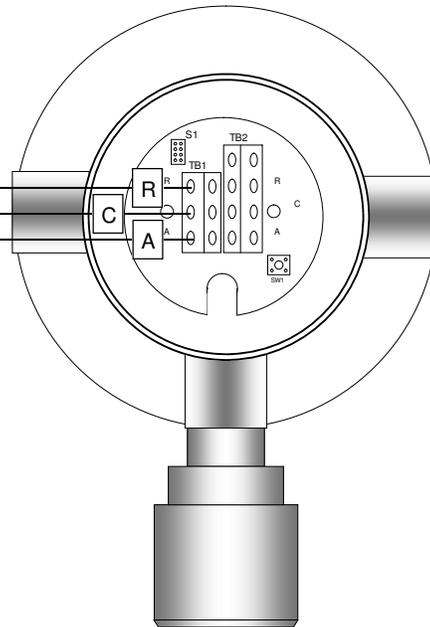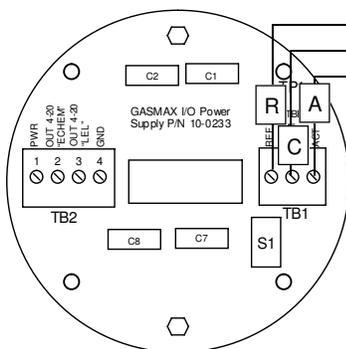only. Reinstall the GASMAX II display and cover.

Apply power and allow the instrument to warm up for a
minimum of one (1) hour. Readjust the sensor voltage to
3.5VDC *as measured at the sensor junction box* across
pins "R" and "A".

Perform a balance adjustment as described in the
GASMAX manual.

CALIBRATION

Follow the on-screen instructions to calibrate the unit.
When calibration is complete, the GASMAX II will
indicate CAL DELAY and then resume normal operation.

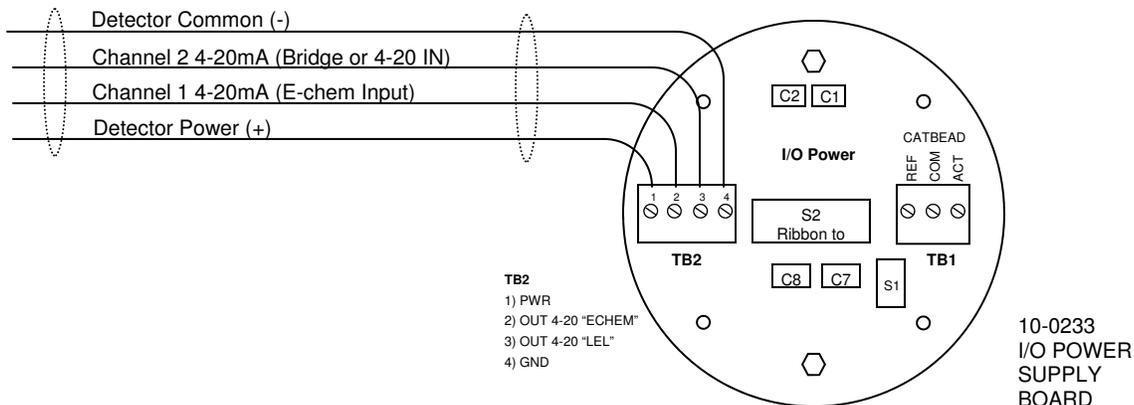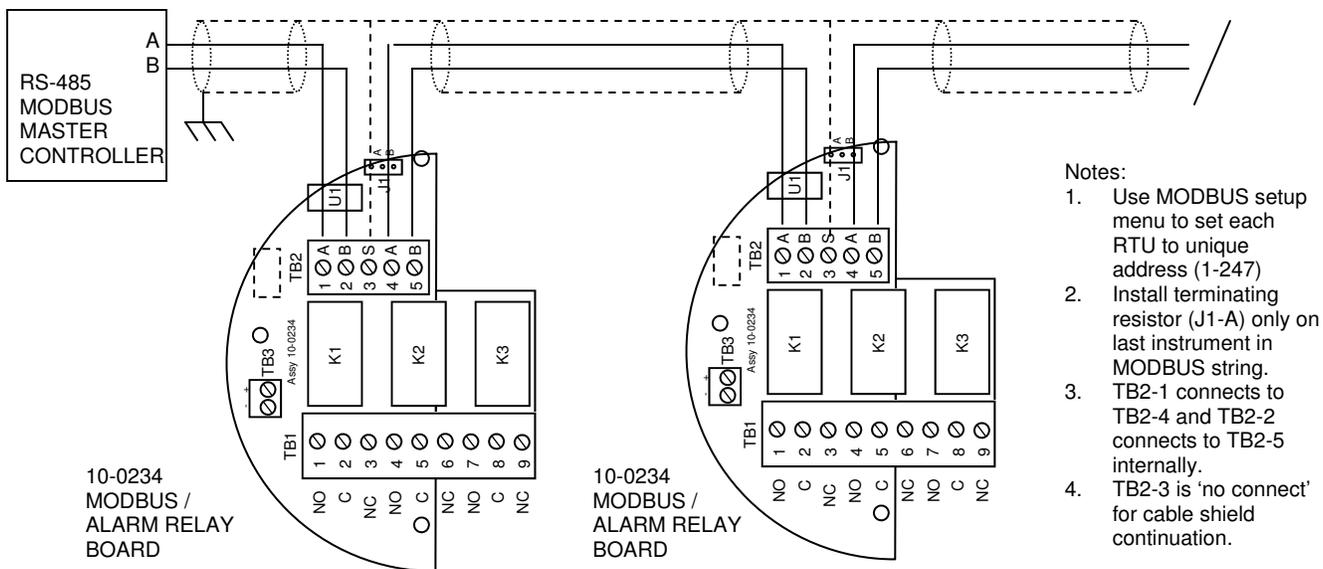GASMAX II Power Supply Board

Remote Combustible Sensor Assembly

Important:

**Do NOT exceed 4.5V across remote sensor
terminals R & A with the sensor in place.
If moisture is present, do not install remote
sensor with unused inlet facing up.**

GASMAX II 4-20mA WIRING DIAGRAM

Detector Common (-)
Channel 2 4-20mA (Bridge or 4-20 IN)
Channel 1 4-20mA (E-chem Input)
Detector Power (+)

C2 C1

CATBEAD

I/O Power

REF COM ACT

1 2 3 4
TB2

S2
Ribbon to

TB1

TB2
1) PWR
2) OUT 4-20 "ECHEM"
3) OUT 4-20 "LEL"
4) GND

C8 C7   S1

10-0233
I/O POWER
SUPPLY
BOARD

GASMAX II MODBUS® INTERFACE WIRING DIAGRAM

A
B

RS-485
MODBUS
MASTER
CONTROLLER

U1

J1

TB2
1 A 2 B 3 S 4 A 5 B

TB3
Assy 10-0234

K1   K2   K3

TB1
1 2 3 4 5 6 7 8 9
NO C NC NO C NC NO C NC

10-0234
MODBUS /
ALARM RELAY
BOARD

U1

J1

TB2
1 A 2 B 3 S 4 A 5 B

TB3
Assy 10-0234

K1   K2   K3

TB1
1 2 3 4 5 6 7 8 9
NO C NC NO C NC NO C NC

10-0234
MODBUS /
ALARM RELAY
BOARD

Notes:
1. Use MODBUS setup menu to set each RTU to unique address (1-247)
2. Install terminating resistor (J1-A) only on last instrument in MODBUS string.
3. TB2-1 connects to TB2-4 and TB2-2 connects to TB2-5 internally.
4. TB2-3 is 'no connect' for cable shield continuation.

GASMAX II ISOLATED 4-20mA WIRING DIAGRAM

U8

Assy 10-0250
Isolated 4-20mA Output

TB1

4
3 +
2 -
1 +

Isolated 4-20mA output for E-chem Input (Ch 1)

Isolated 4-20mA output for Bridge or 4-20mA Input (Ch2)