



FOR BELOW GRADE, AUTOMATIC PROTECTION

# Propane Gas Detector

## ALARM & GAS VALVE CONTROLLER



### 4S1-GVC

#### Gas Valve Controller

The 4S1-GVC is a detector of propane (or other gas), that sounds an alarm and turns off the valve when propane is detected. It is totally self-contained and requires only four Class two connections: 2 to the 24V transformer, and 2 to the gas valve.

The normal application for the 4S1-GVC is to monitor the area where all gas appliances are located (usually a basement utility area), and control a separate gas valve (not part of an appliance) that is located outside of the building.

The alarm/valve actuation is factory set to 10% of the LEL (Lower Explosive Limit) of propane. The 4S1-GVC will also work in natural gas applications.

In below grade propane installations, a 4S1-GVC mounts near each propane appliance, about one foot above the floor, or at the level of the pilot light. For natural gas applications, the 4S1-GVC mounts centrally about one foot from the ceiling.

#### SPECIFICATIONS:

- **ALARM LEVEL:** 10% of lower exposure limit (LEL) of propane. (2% by volume)
- **ALARM SOUND LEVEL:** 88db AT 10 Feet
- **GAS VALVE TYPE:** Normally closed, Energized by the 4S1-GVC to allow gas flow.
- **GAS VALVE CURRENT RATING:** Not to exceed 4 Amps @ 24VAC
- **4S1-GVC POWER CONSUMPTION:** 1.5VA @ 24VAC
- **SIZE:** 4 ½ x 4 ½ x 2 inches
- **SHIPPING WEIGHT:** 2 lbs.
- **REQUIRED MAINTENANCE:** None
- **COLOR:** White
- **CORD LENGTH:** 10 Feet

#### SPECIAL FEATURES:

- **Fail safe:** any failure in the 4S1-GVC, or power to it, will result in gas shut off
- **DESIGNED TO BE INHERENTLY FLAMEPROOF**
- **LATCHES IN:** Safety feature that requires manual reset (push button on unit) after gas alarm. After power failure, unit resets itself
- **CLASS TWO SYSTEM:** Low voltage operation
- **DETECTS MANY GASES:** Propane, Butane, LP, Methane, Natural gas, Gasoline Fumes

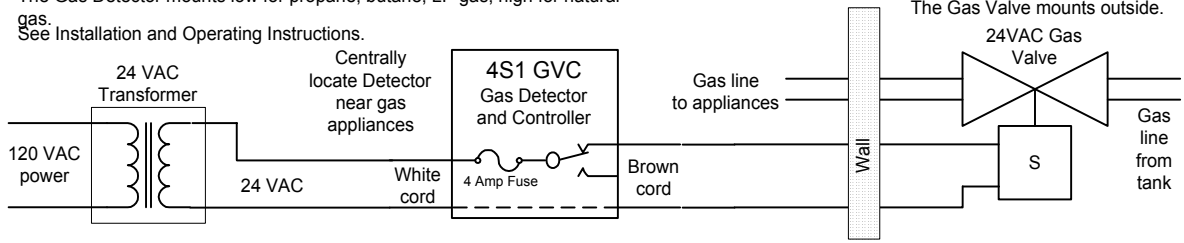
#### Manufactured By:

**Macurco**  
3946 S. Maripisa Street  
Englewood, CO 80110  
303-781-4062 Fx: 303-761-6640  
www.macurco.com

#### Distributed By:

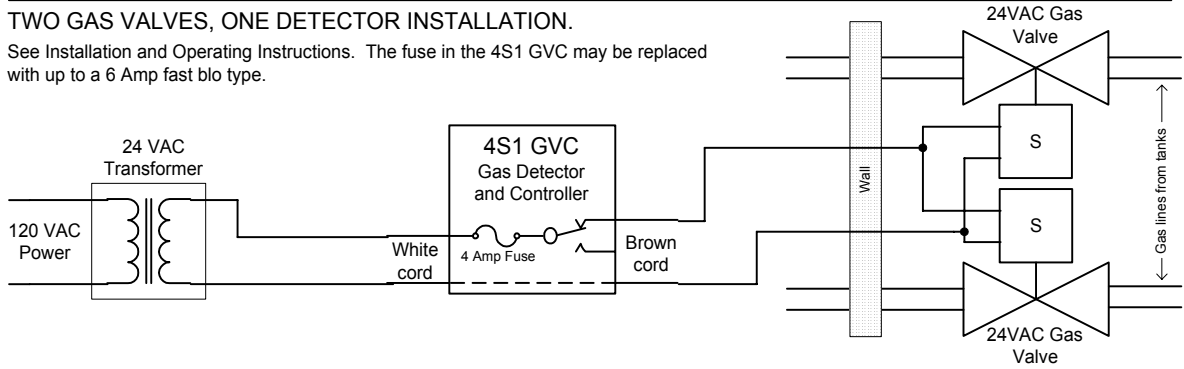
### NORMAL ONE DETECTOR, ONE GAS VALVE INSTALLATION

The Gas Detector mounts low for propane, butane, LP gas; high for natural gas.  
See Installation and Operating Instructions.



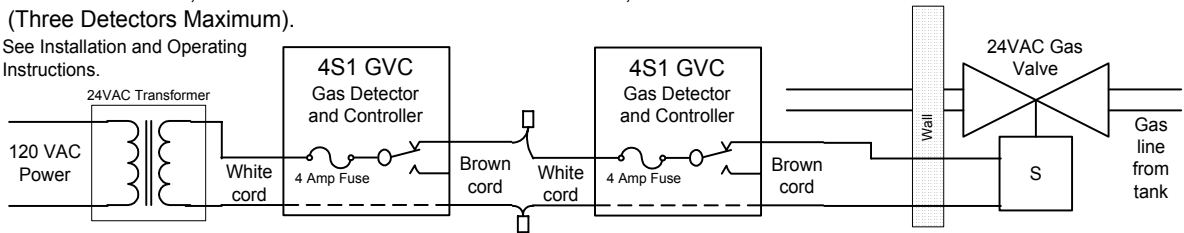
### TWO GAS VALVES, ONE DETECTOR INSTALLATION.

See Installation and Operating Instructions. The fuse in the 4S1 GVC may be replaced with up to a 6 Amp fast blo type.



### ONE GAS VALVE, MULTIPLE DETECTORS INSTALLATION, (Three Detectors Maximum).

See Installation and Operating Instructions.



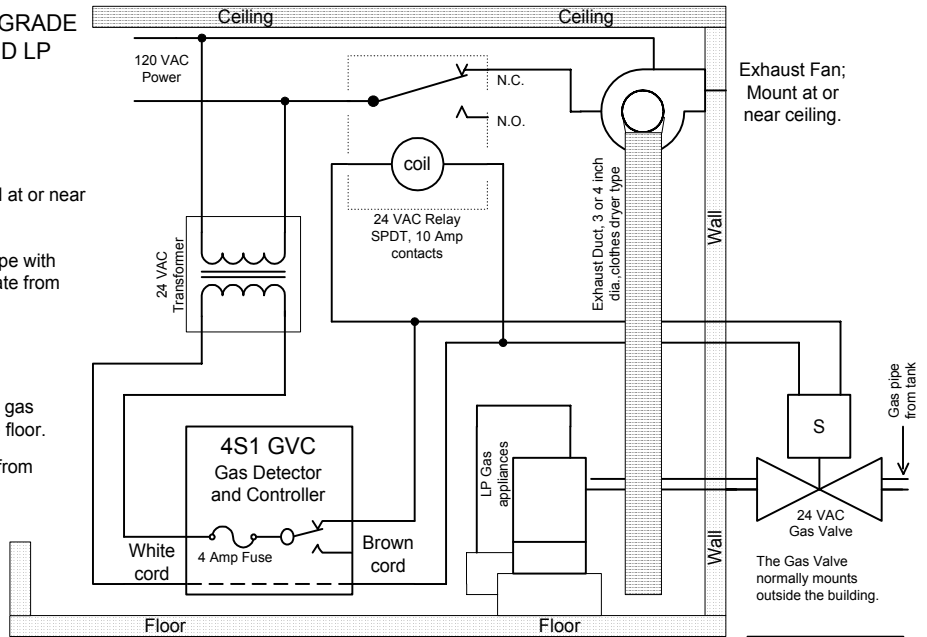
### 4S1 GVC USED BELOW GRADE TO EXHAUST UNBURNED LP GAS PER UNIFORM MECHANICAL CODE Section 304-5, 1997.

Relay and Fan must be mounted at or near the ceiling.

Fan must be of Squirrel Cage type with inlet ducting and exhaust separate from motor. Suggested fans:  
Grainger 4C817  
McLean Engineering 412

4S1 GVC mounts centrally near gas appliances, six inches above the floor.

The exhaust duct hose extends from the fan to the floor near the gas appliances.



If the installation is in an area of frequent or prolonged power outages, an electronic re-ignition system might be installed on the furnace. (Loss of power shuts off the gas with this 4S1 GVC detection system.) Propane re-ignition systems such as those by Honeywell, Robershaw and White-Rodgers are available for propane furnaces.