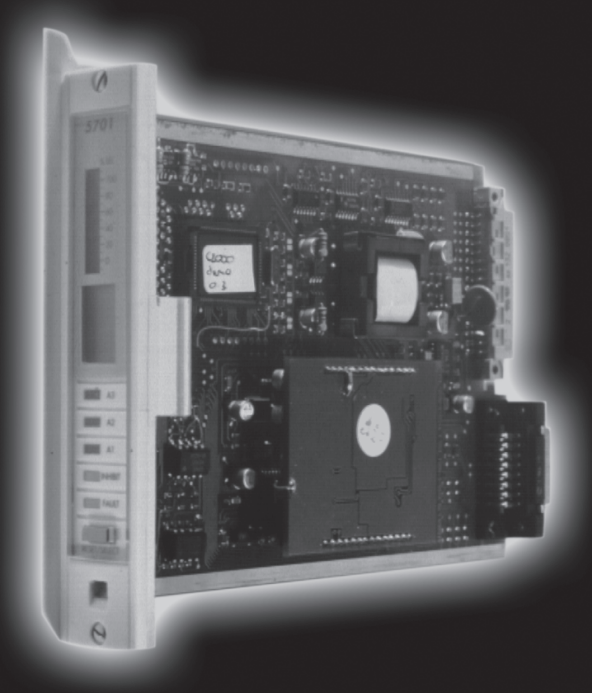
Operating Instructions

Honeywell

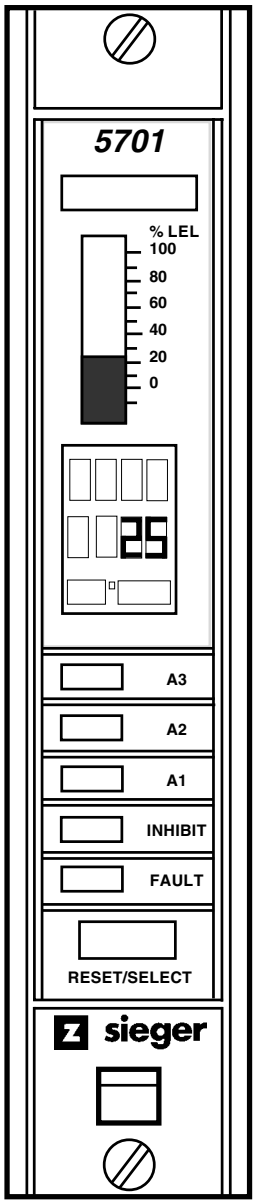


Sieger System 57
5701 Control System

CHAPTER 2 - SYSTEM DESCRIPTION

4. SINGLE CHANNEL CONTROL CARDS

4.1 General



The 5701 Single Channel Control Card provides control, display and alarm facilities for a connected gas detector. The front panel display indicates the gas reading and channel status while LEDs are used for alarms. A push-button is provided for resetting the alarms and selecting the card for use with the Engineering Card.

The operation of the control card is microprocessor controlled and is fully definable for a wide range of connected gas detectors and application requirements. The software configuration setup is stored in an EEPROM.

There are two types of control card depending on the type of gas detector being fitted to the system:

a. Single Channel Control Card 4 - 20mA. Part Number 05701-A-0301.

b. Single Channel Control Card Catalytic. Part Number 05701-A-0302.

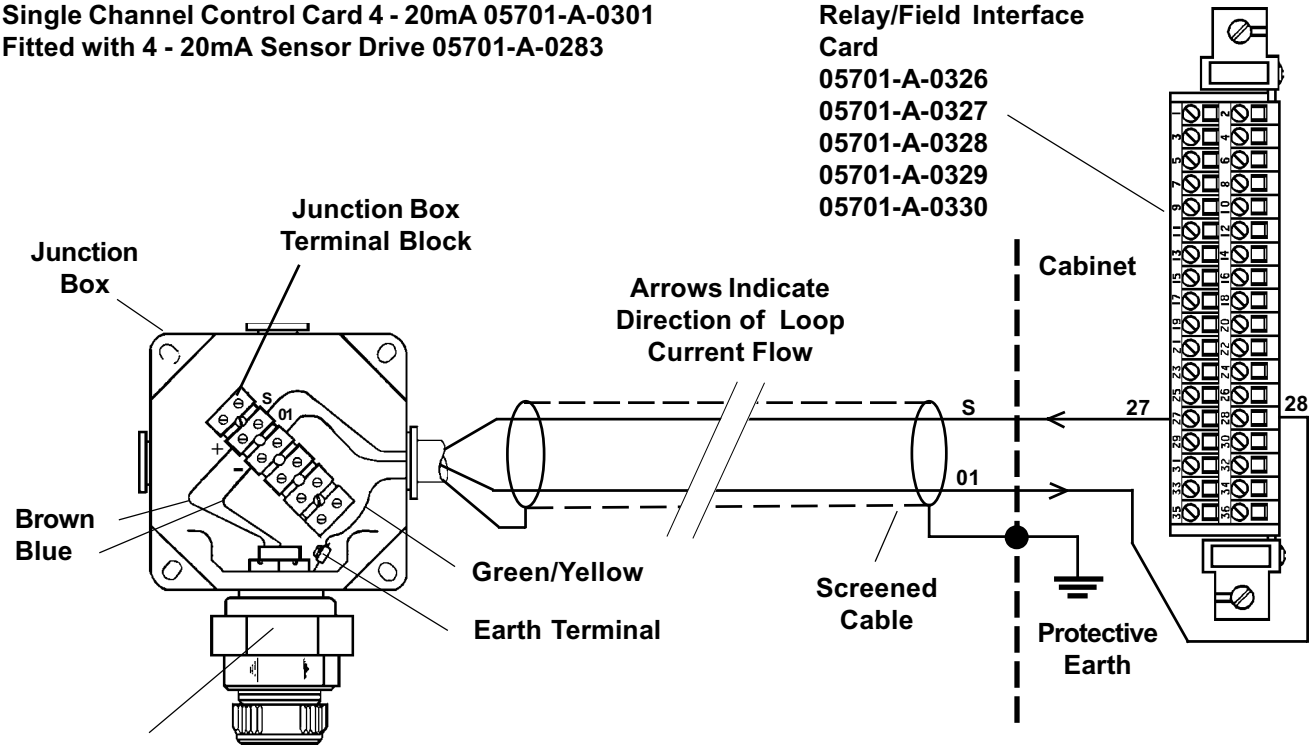
Each of the above control cards consist of a single channel control card fitted with the respective plug-in sensor drive module.

An optional Analogue Output Module can also be plugged into the single channel control card to provide a remote output of the channel card readings.

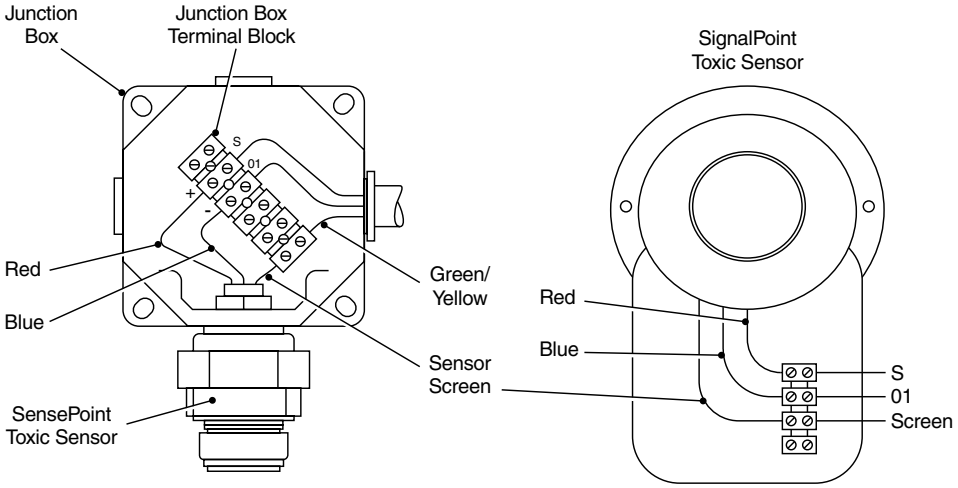
CHAPTER 4 - INSTALLATION INSTRUCTIONS

Single Channel Control Card 4 - 20mA 05701-A-0301
Fitted with 4 - 20mA Sensor Drive 05701-A-0283

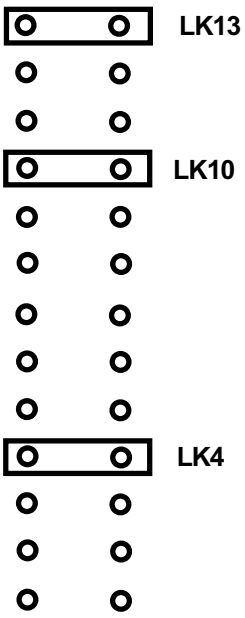
Relay/Field Interface Card
05701-A-0326
05701-A-0327
05701-A-0328
05701-A-0329
05701-A-0330



811, 911 ECC, S2000
Toxic Sensor



Link Positions

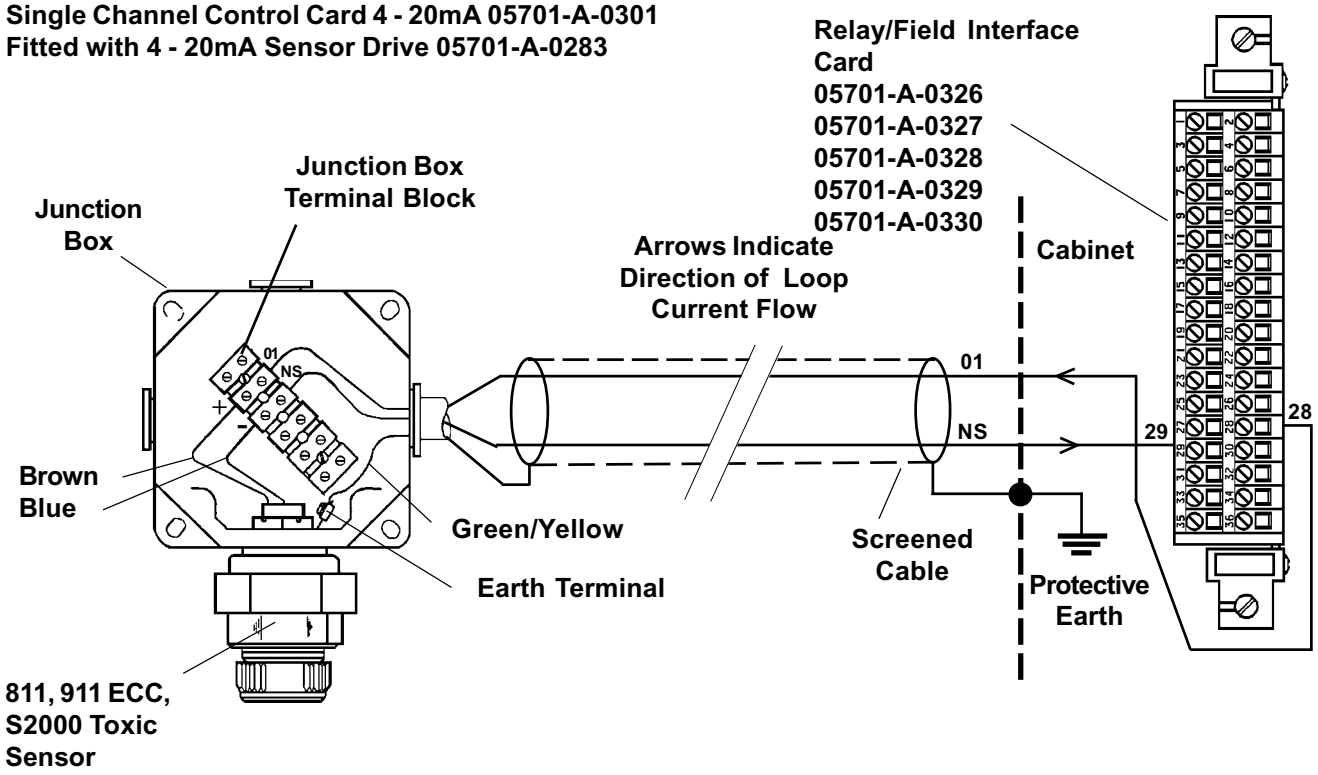


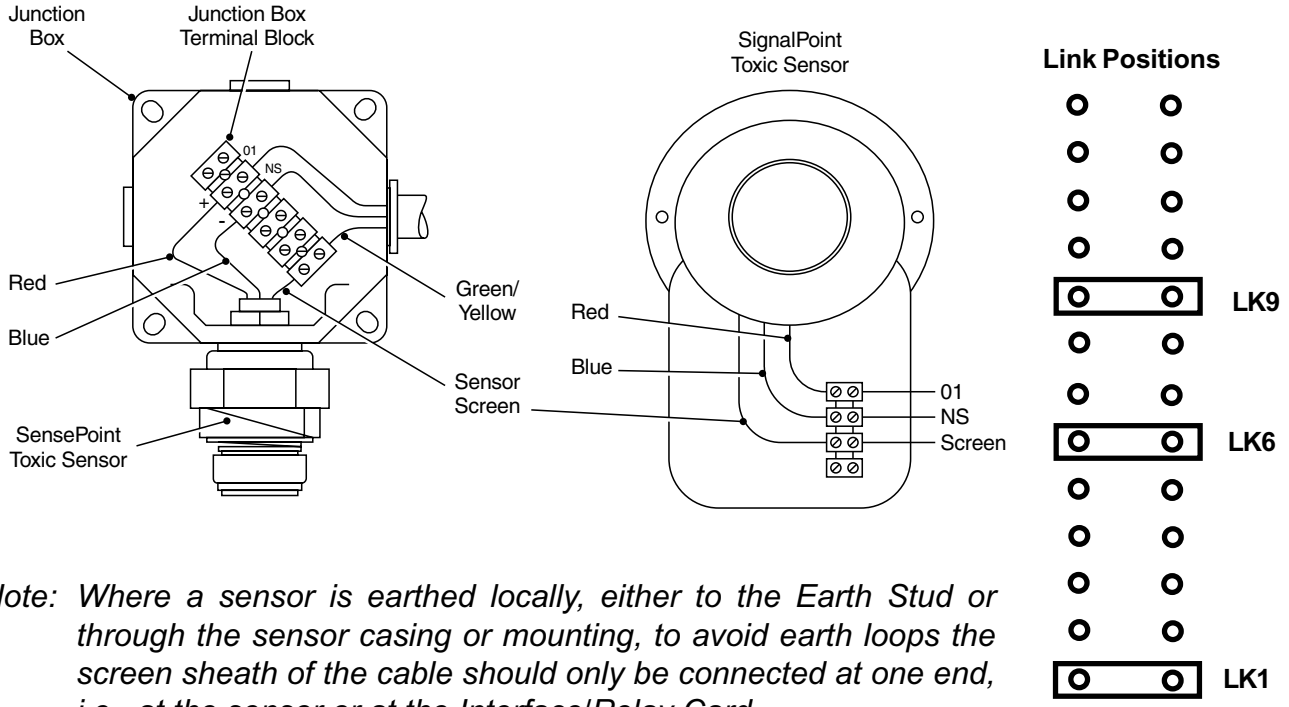
Note: Where a sensor is earthed locally, either to the Earth Stud or through the sensor casing or mounting, to avoid earth loops the screen sheath of the cable should only be connected at one end, i.e., at the sensor or at the Interface/Relay Card.

Loop Powered Sensor (Measuring Resistance in Supply Return)

CHAPTER 4 - INSTALLATION INSTRUCTIONS

Single Channel Control Card 4 - 20mA 05701-A-0301
Fitted with 4 - 20mA Sensor Drive 05701-A-0283





Note: Where a sensor is earthed locally, either to the Earth Stud or through the sensor casing or mounting, to avoid earth loops the screen sheath of the cable should only be connected at one end, i.e., at the sensor or at the Interface/Relay Card.

Loop Powered Sensor (Measuring Resistance in Supply Positive Line)

CHAPTER 4 - INSTALLATION INSTRUCTIONS

13.4 4 - 20mA Transmitter Connections

CAUTION

The power provided by the Single Channel Control Card is derived from the dc input to the System 57 (18V to 32V). Check that the transmitter to be connected is compatible with the actual supply voltage used.

The maximum current that may be sourced from the field terminals of an individual Single Channel Control Card to power a field device is 500mA, however, the total current sourced from all the channels should not exceed the maximum backplane load current of 8A.

Transmitters powered from the Single Channel Control Card require either three or four wire connections and the sensor documentation will indicate the 0V and +24V power connections and the positive and negative loop connections.

At the System 57 end of the field cable the sensor wires should be connected to the S, 01, NS, 0V or 24V terminals on the Field Interface or Relay Card that is attached to the required Single Channel Display Card. The exact terminals used vary depending upon whether three or four wire topology is used, and the requirement for loop current source or sink configuration. Link options must also be set correctly on the 4-20mA Sensor Drive Module (see Section 12.3).

The sensor cable screen should be connected to the system earth at the Field Interface/Relay Card, using the GROUND terminal, or where the cable enters the cabinet using a metal cable gland, or by other suitable means.