

IST200 Intelligent System Translator

For Use With Intrinsically Safe Detectors

Specifications

Input Voltage (V in):	15 to 32 VDC
Output Voltage:	20 to 24 VDC
Input Current:	17mA @ V in = 15V 9.7mA @ V in = 24V
Output Current:	7.6mA maximum

NOTE: Input and output currents assume there are no wiring faults and that the IST200 is loaded per the panel manufacturer's instructions.

Before Installing

This information is included as a quick reference installation guide. Refer to the control panel installation manual for detailed system information. If the IST200 will be installed in an existing operational system, inform the operator and local authority that the system will be temporarily out of service. Disconnect power to the control panel before installing the IST200.

NOTICE: This manual should be left with the owner/user of this equipment.

General Description

The IST200 is intended for use in intelligent, intrinsically safe systems. This translator serves as an interface, allowing the control panel to communicate through a shunt-diode safety barrier to intrinsically safe detectors.

Compatibility Requirements

To insure proper operation, the IST200 shall be connected to listed compatible system control panels only.

Mounting IST200 Devices

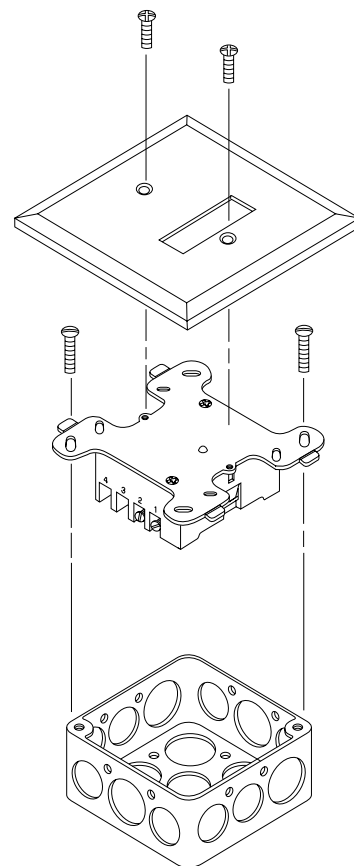
The IST200 mounts directly to a 4" square electrical box, as shown in Figure 1A. The box must have a minimum depth of 2 1/8".

Wiring

NOTE: All wiring must conform to applicable local codes, ordinances and regulations. The translator must be inserted into and attached to a 4"x4"x2 1/8" electrical box.

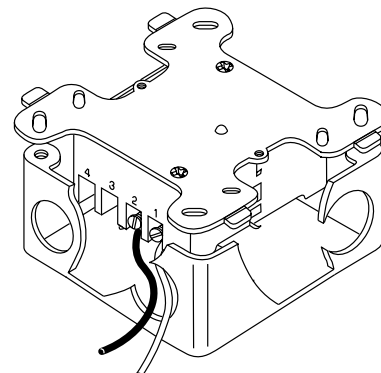
1. Install translator wiring in accordance with the job drawings and appropriate wiring diagrams (Figure 2).
2. Secure translator to electrical box (supplied by installer), as shown in Figure 1A.

Figure 1A. IST200 mounting:



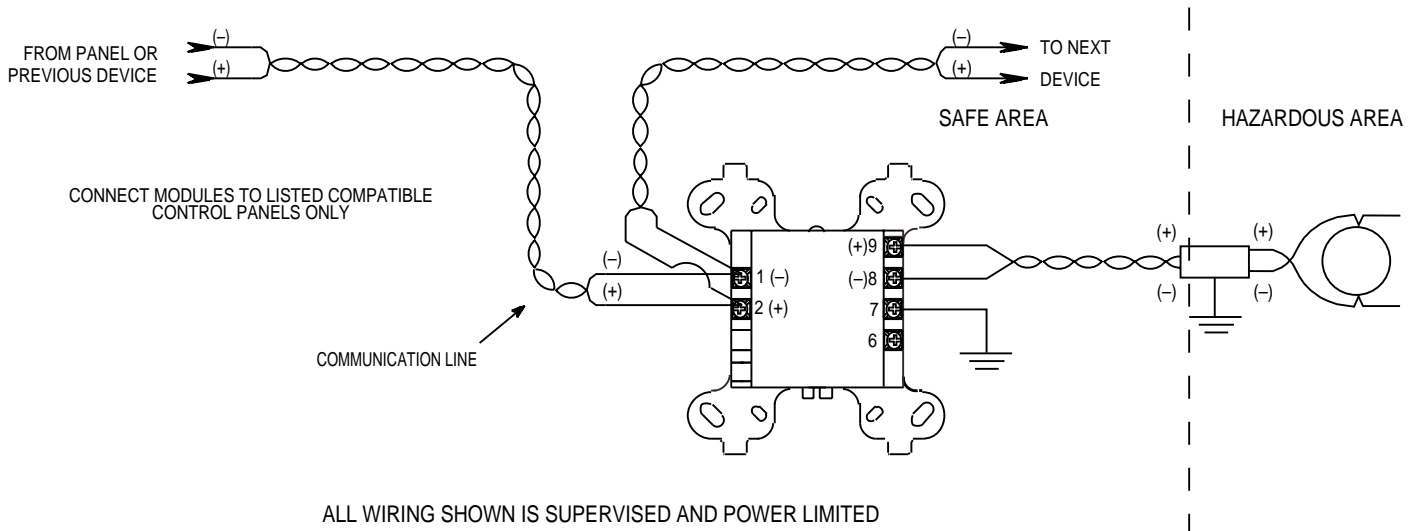
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Figure 1B. Electrical box cut-away view:



A78-2611-13

Figure 2. System wiring diagram:



A78-2280-16

NOTE:

1. Any single channel shunt zener diode safety barrier, or single channel of a dual channel shunt zener diode safety barrier certified by BASEEFA or any EEC approved certification body to [Ex ia] IIC having the following, output parameters may be used:

$$U_z = 28V$$

$$I_{max: out} = 93.3 \text{ mA}$$

$$W_{max: out} = 0.66 \text{ W}$$

In any safety barrier used, the output current must be limited by an internal resistor “R”, such that $I_{max: out} = U_z/R$.

2. It is recommended that all installation wires be shielded and properly grounded.

Three-Year Limited Warranty

System Sensor warrants its enclosed translator to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for this translator. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the repair or replacement of any part of the translator which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture. After phoning System Sensor's toll free number 800-SENSOR2 (736-7672) for a Return Authorization number, send defective units postage prepaid to: System Sensor, Repair Department,

RA # _____, 3825 Ohio Avenue, St. Charles, IL 60174. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to repair or replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.