

## LINEAR SEG-1

# LINEAR SEG-1 IEI Secured Ethernet Gateway Instruction Manual

Model: SEG-1

## 1. INTRODUCTION

The LINEAR SEG-1 IEI Secured Ethernet Gateway is designed to facilitate secure communication between IEI access control systems and a network. It converts TCP/IP data to serial data, enabling access systems to send and receive information over a standard network. This allows for programming and management of the access panel from any network-connected PC running Hub Manager Professional (version 5.0 or higher).

## 2. PRODUCT OVERVIEW

The SEG-1 gateway features a compact design with essential ports and indicators for network and serial communication.



**Figure 1:** Front view of the LINEAR SEG-1 IEI Secured Ethernet Gateway. The front panel includes an Ethernet port labeled "NETWORK", two serial ports labeled "RS232" and "RS485", and indicator LEDs for status.

Key components include:

- **NETWORK Port:** RJ45 Ethernet connector for TCP/IP communication.

- **RS232 Port:** Serial communication port.
- **RS485 Port:** Serial communication port.
- **Status LEDs:** Indicators for power, network activity, and data transmission.

### 3. SETUP INSTRUCTIONS

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Follow these steps to properly set up your SEG-1 gateway:

1. **Mounting:** Securely wall mount the SEG-1 unit using separately provided hardware. Choose a location that allows for easy access to power and network connections, and is within range of the IEI access panel.
2. **Power Connection:** Connect a separate 12VDC power supply (150 mA maximum) to the SEG-1. A modular cord is provided for communication with the access panel, which may also carry power depending on the specific access panel model. Ensure the power supply is stable and meets the specified requirements.
3. **Network Connection:** Connect an Ethernet cable from your network router or switch to the "NETWORK" RJ45 port on the SEG-1 gateway. Verify that the network connection is active (indicated by corresponding LEDs).
4. **Serial Connection:** Connect the appropriate serial cable from the IEI access panel to either the "RS232" or "RS485" port on the SEG-1, depending on the access panel's serial interface.
5. **Software Configuration:** Install and configure Hub Manager Professional (version 5.0 or higher) on a network-connected PC. Refer to the Hub Manager Professional manual for detailed software setup and gateway integration instructions.

### 4. OPERATING INSTRUCTIONS

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Once properly installed and configured, the SEG-1 gateway operates as an interface between your network and the IEI access control system.

- **Data Conversion:** The gateway automatically converts TCP/IP data from the network to serial data for the access panel, and vice-versa.
- **Remote Management:** Use Hub Manager Professional on a networked computer to manage and program the IEI access system. All commands and data will be routed through the SEG-1 gateway.
- **Status Monitoring:** Observe the status LEDs on the front panel for indications of power, network link, and data activity. Refer to the LED indicator section (if available in a more detailed manual) for specific meanings.

### 5. MAINTENANCE

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The LINEAR SEG-1 gateway requires minimal maintenance to ensure optimal performance.

- **Cleaning:** Periodically clean the exterior of the unit with a soft, dry cloth. Avoid using liquid cleaners or solvents.
- **Environmental Conditions:** Ensure the unit is operated within its specified temperature and humidity ranges. Avoid exposing the unit to excessive dust, moisture, or direct sunlight.
- **Firmware Updates:** Check the LINEAR website periodically for any available firmware updates for the SEG-1 gateway. Follow the provided instructions carefully for any update procedures.

### 6. TROUBLESHOOTING

If you encounter issues with your SEG-1 gateway, consider the following troubleshooting steps:

- **No Power:**

- Verify the 12VDC power supply is correctly connected and functioning.
- Check all power cables and connections.

- **No Network Connectivity:**

- Ensure the Ethernet cable is securely connected to both the SEG-1 and the network device (router/switch).
- Check network status LEDs on the SEG-1 and the network device.
- Confirm network settings on the PC running Hub Manager Professional.

- **Communication Errors with Access Panel:**

- Verify the correct serial port (RS232 or RS485) is being used and the cable is properly connected.
- Ensure the IEI access panel is powered on and functioning correctly.
- Check the configuration settings within Hub Manager Professional for the correct gateway and access panel parameters.

- **Hub Manager Professional Connection Issues:**

- Confirm that Hub Manager Professional (v5.0 or higher) is installed and configured correctly.
- Ensure the PC is on the same network as the SEG-1 gateway.
- Check for any firewall settings on the PC or network that might be blocking communication.

## 7. SPECIFICATIONS

Feature	Detail
Model	SEG-1
Function	TCP/IP to Serial Data Converter
Compatibility	IEI Access Systems, Hub Manager Professional (v5.0+)
Power Requirement	12VDC, 150 mA max (separate power supply required)
Mounting	Wall mount (hardware not included)
Connectivity	Ethernet (RJ45), RS232, RS485
Item Weight	15 pounds
Manufacturer	LINEAR RESEARCH
Date First Available	December 20, 2010

## 8. WARRANTY INFORMATION

For detailed warranty information regarding the LINEAR SEG-1 IEI Secured Ethernet Gateway, please refer to the warranty card included with your product packaging or visit the official LINEAR website.

Warranty terms and conditions may vary by region and purchase date.

## 9. TECHNICAL SUPPORT

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If you require technical assistance or have questions not covered in this manual, please contact LINEAR customer support. Contact information can typically be found on the manufacturer's website or on the product packaging.

*Note: Always ensure you have your product model number (SEG-1) and any relevant purchase information available when contacting support.*