SIEMENS

Fire Safety

Installation Instructions

Model LED-3/4

Remote Annunciator for use with the SXL-EX Control Panel (For indoor use only in dry environments)

INTRODUCTION

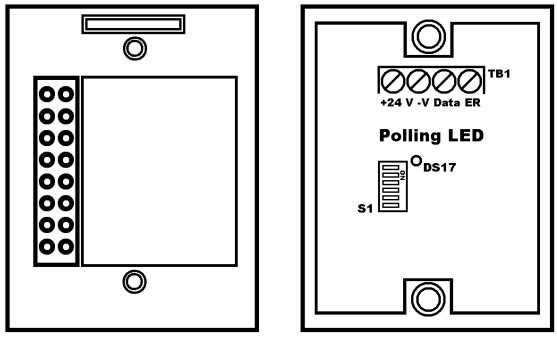
The Model LED-3/4 Remote Annunciator from Siemens Builidng Technologies, Inc., shown in Figure 1 is an eight zone annunciator containing sixteen LEDs. The LEDs can be used to indicate the alarm, supervisory, or trouble status of initiating zones.

A maximum of 2 Remote Annunciators can be added to each SXL-EX system so that the status of 8 zones can be displayed at two different locations.

In addition, a green polling LED on the back of the annunciator indicates the status of the annunciator when troubleshooting the installation.

TABLE 1
ELECTRICAL OPERATING CHARACTERISTICS

Input Power	24 VDC (no LEDs on) 10mA
Output Power	2mA per ALARM/SUPERVISORY/ TROUBLE LED 42mA max (all LEDs on)



FRONT **BACK**

Figure 1
LED-3/4 Remote Annunciator

Remove all system power before installation, first battery and then AC.
(To power up, connect AC first, then the battery.)

INSTALLATION GUIDELINES

Install in accordance with NFPA 72, NEC Article 760, and any applicable local codes.

ANNUNCIATOR INSTALLATION

Setting the Address for SXL-EX

Set the address of the module using switch S1 located on the back of the module.

To set address 1:

Set SW1 of S1 to OFF
Set SW2-SW6 of S1 to ON

To set address 2:

Set SW2 of S1 to OFF
Set SW1 and SW3-SW6 to ON

Any other setting causes a trouble indication on the panel. There also would be no activity from the annunciator or from the polling LED, DS17, which is located next to the S1 switch.

Wiring

Connect the system wiring to the TB1 terminals on the annunciator module. Refer to Table 2, Table 3, and Figure 2 for proper wiring connections and cable length.

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TABLE 2 Terminal Connections	
Terminal	**Function**
24V	Provides power to circuitry
DATA	Serial communication line
-V	Return line
ER	Earth Return

TABLE 3 Maximum Cable Length vs. Wire Size	
AWG	**Cable Length**
14	2000 feet
16	2000 feet
18	1000 feet

Observe the wiring polarity when making connections. Damage may result from incorrect wiring.

Mounting

1. Mount the annunciator semiflush using a single gang electrical backbox.
2. DO NOT tighten the mounting screws since the module may have to be removed during troubleshooting (when looking for activity from the polling LED, DS17, on the back of the module.
3. After the system is tested, tighten the mounting screws.
4. Fill in the appropriate information for each zone on the card provided.

PROGRAMMING THE SXL-EX SYSTEM FOR THE LED-3/4 MODULE

Enabling the Program Mode

Enter level 9 of the programming mode.

1. Press the RESET and DRILL keys at the same time. The TROUBLE LED lights, and the letter **E** appears on the seven segment display.
2. Enter the password by pressing the appropriate keys:
   ACK = 1 DRILL = 3
   RESET = 2 SILENCE = 4

   Then press the SILENCE key.

   The seven segment display either shows **F,** to indicate an incorrect password, or **A,** to indicate that the password is accepted. If the letter **F** appears, repeat Steps 1 and 2. If the letter **A** appears, continue to the next step.
3. Press the ACK key once to enter the Program mode. The PROGRAM/TEST LED on the front panel lights and the seven segment display shows the letter **P.**

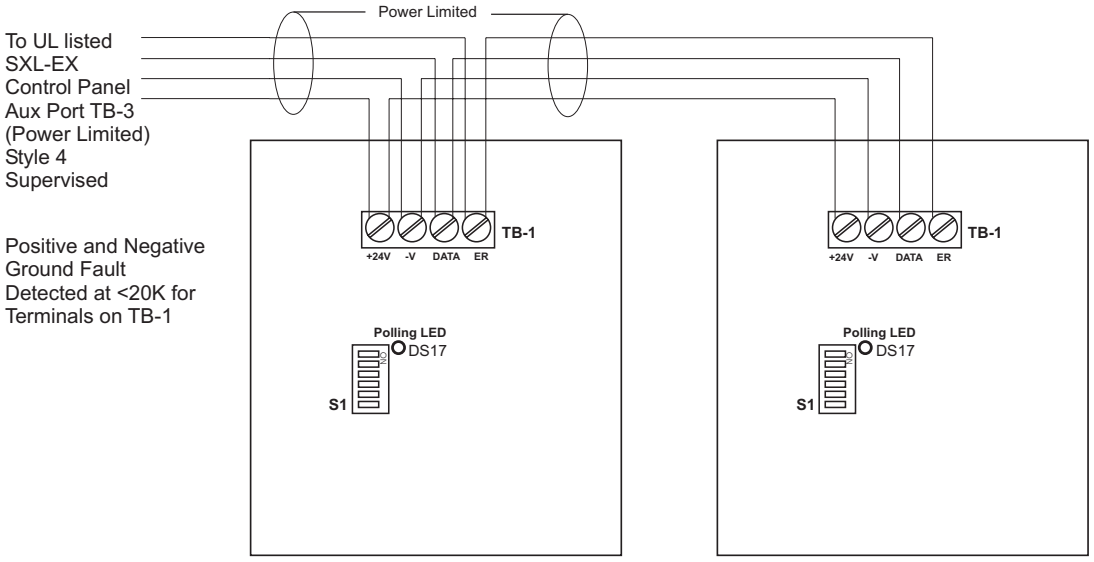


Figure 2
LED-3/4 Wiring Connections

4. Press the RESET key nine times to select program level 9 to program the LED-3/4. Then press the SILENCE key to select program level 9.

Program level 9 has only one sublevel:

Enable/Disable SRC-8 and LED-3/4

The sublevel is displayed on the seven segment display following the hyphen (-). To select the desired sublevel, press the SILENCE key as required. Select the device according to the table below:

IDC Zone 1 LED SRC-8*
IDC Zone 2 LED LED-3/4 No. 1
IDC Zone 3 LED LED-3/4 No. 2
(IDC = Initiating Device Circuit)

* See SXL-EX Manual, P/N 315-095997, for details.

To enable/disable the LED-3/4:

1. Press the RESET key to advance the IDC TROUBLE LED to the desired device.
2. Press the DRILL key to enable or disable the device.
3. The ALARM LED indicates the enable/disable status:
   If the LED is ON, the LED-3/4 is enabled.

Exiting the Program Mode

To exit the Program mode:

1. Press the ACK key until the PROGRAM/TEST LED turns off.
2. Continue to press ACK until the letter **L** appears on the seven segment display.
3. Then press the SILENCE key to exit.

MAINTENANCE AND TESTING

No periodic maintenance is required; however, Siemens Building Technologies, Inc. recommends periodic testing.

Note: Before testing, you MUST notify the personnel in charge of the Fire Alarm panel, since the test may disrupt normal business operations. In addition, you MUST notify the local Fire Department if the department is connected to the municipal tie.

Alarm Operation

Test the annunciator for alarm operation by:
- Activating an initiating device on a zone configured for alarm.
- Confirming the normal alarm functioning of the unit and the Control Panel.

The ALARM LED (LED on left) should glow red for the appropriate zone.

Supervisory Operation

Test the annunciator for supervisory operation by:
- Activating an initiating device on a zone configured for supervisory.
- Confirming the normal supervisory functioning of the unit and the Control Panel.

The SUPERVISORY LED (LED on left) should glow yellow for the appropriate zone.

Trouble Operation

Test the annunciator for trouble operation by:
- Disconnecting a wire from a zone at the Control Panel.
- Confirming the normal trouble functioning of the unit and the Control Panel.

The TROUBLE LED (LED on right) for the appropriate zone should glow yellow.

Annunciator Supervision

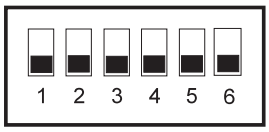
Check annunciator supervision by:
- Disconnecting the DATA line from TB1 on the module.
- The Control Panel indicates the trouble, but if there are two annunciators on the system, it does not tell which of the two is in trouble.

For more information on this supervision, see the section on ***Troubleshooting on page 4.***

Lamp Test

Testing the LED-3/4 Module Lamps

To test the LEDs on the LED-3/4 module for operation, set the address on Switch S1 as shown below:



After testing is complete, reset Switch S1 to the desired address setting for the module.

Enabling the Test Mode for SXL-EX

Enter level 5 of the test mode.

1. Press the RESET and DRILL keys at the same time. The TROUBLE LED lights, and the letter **E** appears on the seven segment display.
2. Enter the password by pressing the appropriate keys:
   ACK = 1 DRILL = 3
   RESET = 2 SILENCE = 4

   Then press the SILENCE key.

   The seven segment display either shows **F,** to indicate an incorrect password, or **A,** to indicate that the password is accepted. If the letter **F** appears, repeat Steps 1 and 2. If the letter **A** appears, continue on to the next step.
3. Press the ACK key twice to enter the Test Mode. The PROGRAM/TEST LED on the front panel lights, and the seven segment display shows the letter **t.**
4. Select test level 5 for the Lamp Test by pressing the RESET key five times; then press the SILENCE key.

Test level 5 has two sublevels:

1) Local display lamp test
2) Remote display lamp test

The sublevel is displayed on the seven segment display following the hyphen (-). To select the desired sublevel, press the SILENCE key as required.

Press and hold the DRILL key to enable the Lamp Test, and then release the DRILL key to disable the Lamp Test.

Exiting the Test Mode

To exit the test mode, first press the ACK key until the PROGRAM/TEST LED turns off and the letter **L** appears on the seven segment display. Then press the SILENCE key.

BATTERY CALCULATIONS

Battery backup is required for the LED-3/4. To determine the size battery you need use the battery calculation table in the *SXL-EX Manual*, P/N 315-095997.

TROUBLESHOOTING

If an LED fails to respond:

1. Check DS17 on the back of the module for activity. If there is no activity, it means there is a module with possible problems, such as incorrect address, missing or incorrect wiring, no power at the module, or some system problem.
2. Remove the module from its backbox to examine the DS17 LED. **Do not touch the screw terminals to anything or damage could result.**
3. Check the control panel for proper annunciation of the alarm, supervisory, or trouble condition.
4. Check the wiring between the module and the control panel.
5. Check the address setting on switch S1, which is located on the back of the module. Remove the module from its backbox to examine S1.
6. Check that there are 24 volts between the TB1 terminals *+24V* and *-V*.
7. If the problem continues, replace the module.
8. Check the new module for correct wiring and check the address settings on S1 before powering up the system.

If Fault Code 8 appears on the SXL-EX display:

1. The module is connected but is not configured. Refer to the LED-3/4 Programming instructions.
2. The module is configured but is not connected. Refer to the LED-3/4 Annunciator instructions.
3. Check the module for an error in wiring.