

# SIEMENS

## Installation Instructions

VSM-1 Visual Switch Module

VLM-1 Visual LED Module

VFM-1 Visual Fan Module

and VSB-1 or VSB-P Visual Switch Blank Module

### INTRODUCTION

The Model VSM-1 Visual Switch Module from Siemens Industry, Inc. provides the system operator with manual control and annunciation of the MXLV System functions. Each VSM-1 has 8 pushbutton switches with functions assigned to them in the CSG-M (AccuLINK); each pushbutton switch has 2 LEDs to indicate the function status, for a total of 16 LEDs. A label next to each switch indicates the switch's programmed usage. (See Figure 1.)

The VSM-1 is used to manually select speaker, telephone, or strobe zones, as well as a wide range of general system functions, such as All Call, All EVAC, Warden's Page, and Local Speaker. The switch use and zone groupings are assigned in CSG-M.

The Model VLM-1 Visual LED Module from Siemens Industry, Inc. provides LED annunciation of system activity. Each VLM-1 module contains 8 sets of 2 LEDs in three different colors to indicate a variety of system information, such as zone trouble or alarm. In each set, the top LED can be red or green (as programmed); the bottom LED is yellow. A label next to each pair of LEDs indicates its programmed use in CSG-M. (See Figure 1.)

The Model VFM-1 Fan Control Module from Siemens Industry, Inc. provides the system operator with automatic and manual control and annunciation of MXLV fan control functions for energy management. Each VFM-1 has 4 three-position rotary switches with fan

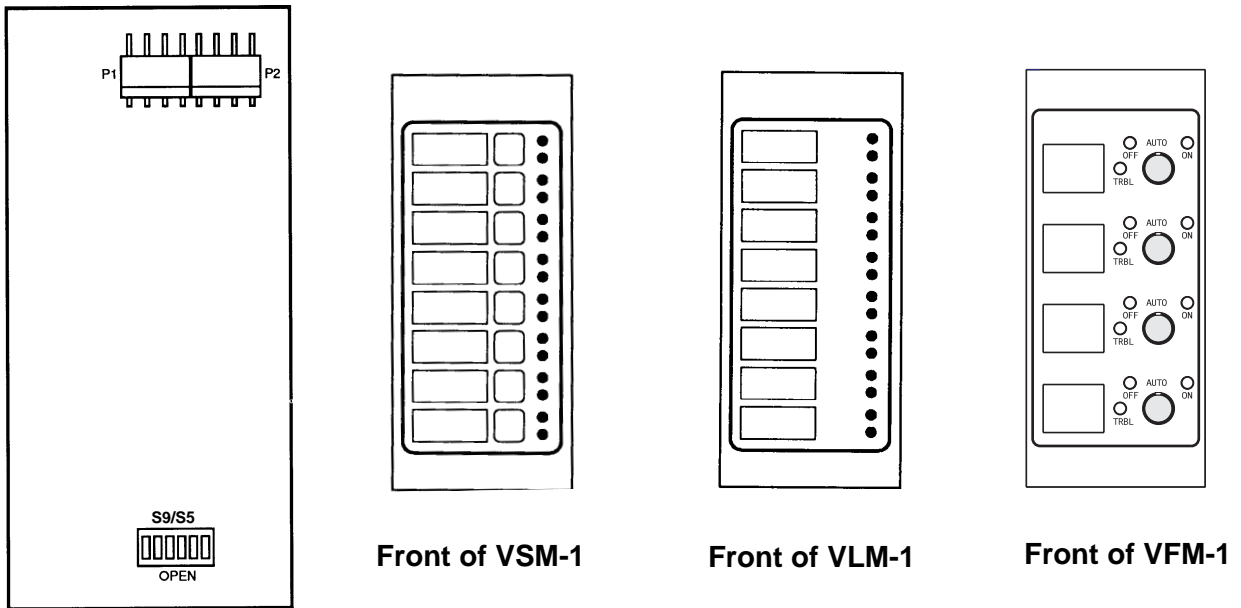
control functions assigned to each of them in the CSG-M. Each rotary switch has three LEDs to indicate function status for a total of 12 LEDs. A label next to each switch indicates the switch's programmed usage (See Figure 1). Refer to Table 1 for a description of the LED functions.

**TABLE 1**  
**VFM-1 LED FUNCTIONS**

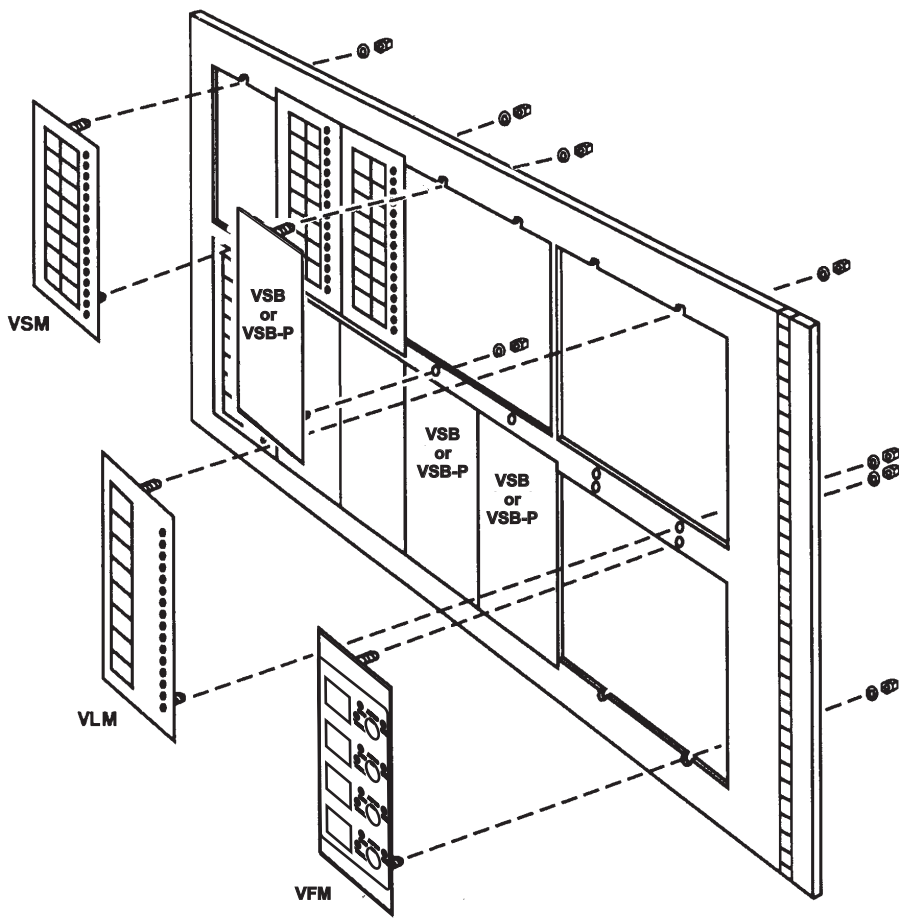
LED Status	Indicates
Flashing Red LED	The fan control has been turned off but the output circuits have not yet deactivated.
Steady Red LED	The outputs have been deactivated.
Flashing Green LED	The fan control has been turned on but the output circuits have not yet activated.
Steady Green LED	The outputs have been activated.
Yellow LED	There is a trouble with any device associated with the fan control switch.

The VFM-1 is used to manually select the mode of operation of a fan circuit.

- OFF deactivates the circuit manually and prevents MXLV logic control.
- ON activates the circuit manually, overriding MXLV logic control.



**Figure 1**  
**VSM-1/VLM-1/VFM-1**  
**Module Board**



**Figure 2**  
**Mounting the VSM-1/VLM-1/VFM-1/VSB-1 or VSB-P**

- AUTO places the circuit under the control of MXLV output logic.

Switch assignments are made in CSG-M.

The VSM-1/VLM-1/VFM-1 module occupies one of up to 31 subaddresses of the ACM-1 Audio Control module. When installing VSM-1/VLM-1/VFM-1 modules, first use the CSG-M configuration printout to locate the address of each module. Use switch S9 on the back of the VSM-1/VLM-1 and switch S5 on the back of the VFM-1 to set the unique address for each module as described below.

**For more information on the Voice System, refer to the MXLV Manual, P/N 315-092036.**

## INSTALLATION

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

1. Remove the card from its protective bag.
2. Refer to the function section of the CSG-M configuration printout for the address of the module.
3. Set the module address on switch S9 for a VSM-1 or a VLM-1, using switches SW1-SW6. For the VFM-1, use switch S5.
  - a. Refer to Figure 1 for the location of S9/S5 on the back of the module.
  - b. Refer to Table 2 for the correct switch settings.
  - c. Set the address (See Note below).
4. After setting the address of a module, label each switch or LED. When viewed from the front panel of the VSM-1/VLM-1/VFM-1, the labels are on the left and the control switches and LEDs are on the right.
  - a. Refer to the CSG-M configuration printout for the address of each module and its assigned functions.
  - b. Remove the label strip from its slot, and type or print a brief function identifier for each switch.
  - c. After completing the label strip, insert it back into its slot.

ADDRESS	6	5	4	3	2	1	ADDRESS	6	5	4	3	2	1
ILLEGAL	0	0	0	0	0	0	16	0	X	0	0	0	0
1	0	0	0	0	0	X	17	0	X	0	0	0	X
2	0	0	0	0	X	0	18	0	X	0	0	X	0
3	0	0	0	0	X	X	19	0	X	0	0	X	X
4	0	0	0	X	0	0	20	0	X	0	X	0	0
5	0	0	0	X	0	X	21	0	X	0	X	0	X
6	0	0	0	X	X	0	22	0	X	0	X	X	0
7	0	0	0	X	X	X	23	0	X	0	X	X	X
8	0	0	X	0	0	0	24	0	X	X	0	0	0
9	0	0	X	0	0	X	25	0	X	X	0	0	X
10	0	0	X	0	X	0	26	0	X	X	0	X	0
11	0	0	X	0	X	X	27	0	X	X	0	X	X
12	0	0	X	X	0	0	28	0	X	X	X	0	0
13	0	0	X	X	0	X	29	0	X	X	X	0	X
14	0	0	X	X	X	0	30	0	X	X	X	X	0
15	0	0	X	X	X	X	31	0	X	X	X	X	X

X = SWITCH CLOSED OR **ON**, O = SWITCH OPEN OR **OFF**

### NOTE

**To open a dipswitch**, press down on the side of the dipswitch marked OPEN. To close a dipswitch, press down on the side of the dipswitch opposite the side marked OPEN.

**To open a slide switch**, push the slide to the side opposite the side marked ON. To close a slide switch, push the slide to the side marked ON.

## MOUNTING

### Refer to Figure 2.

Before mounting each VSM-1/VLM-1/VFM-1 module, check the labels and the address setting of S9/S5 on the back of the module. With the outer door open, mount the VSM-1/VLM-1/VFM-1 modules in the dead front panel, Model MHD-3 or MHD-4, starting at the left-hand corner directly below the microphone. This position is recommended for the most important assigned functions, such as ALL CALL. Group the modules together by function, or by some logical order. VSM-1/VLM-1/VFM-1 modules do not need to be mounted in numeric order by address. (Refer to the MHD Instructions, P/N 315-092101.)

1. Place the module in its designated position with the threaded studs through the dead front mounting holes. (See Figure 2.) Be sure connectors P1 and P2 are at the top of the module. (See Figure 1.)
2. Secure the module in place with the No. 8 washers and nuts provided. **Do not connect the cable until all the modules are mounted.**
3. After mounting all VSM-1/VLM-1/VFM-1 modules, fill in any empty spaces on the MHD panels with blank panels, the Model VSB-P or VSB-1 Visual Switch Blank modules. Mount the VSB-Ps or VSB-1s in the same way as the VSM-1/VLM-1/VFM-1 modules. **For more details, refer to the MXLV Manual, PIN 315-092036.**

## WIRING

Refer to Figure 3.

**All wiring must comply with national and local codes.**

Open the MHD panels so that you are looking at the back of the VSM-1s, the VLM-1s, the VFM-1s and the VSB-Ps or VSB-1s.

Connect the VSM-1/VLM-1/VFM-1 modules together with the cables provided. **The cables are polarized; do not force them.**

1. Start with the VSM-1/VLM-1/VFM-1 module at the far right on the top row.
2. Connect P1 of the first module to P2 of the module to its left, using the cable with the 4 inch wires, P/N 600-192237. Continue in the same manner until all the VSM-1/VLM-1/VFM-1 modules in the row are connected.
3. Connect the cables on the lower row in the same way if any VSM-1/VLM-1/VFM-1 modules are there.
4. Connect P1 of the module on the far left of the top row to P2 of the module on the far right of the bottom row. Use the 40 inch cable, Model MRRC-1 (P/N 600-192106), which is ordered separately. If the lower row has no modules mounted in it, omit this step.

### 5. With an MMB or PSR:

Connect P2 of the VSM-1/VLM-1/VFM-1 module at the far right in the top row to P4 of the TBM-1/-2 Termination Block module, using the 4 foot cable, P/N 600-192258. **The cables are polarized; do not force them.**

**NOTE:** The TBM-1/-2 module is located in the enclosure on the right side next to the MMB or the PSR-1. **For more details, refer to the MXLV Manual, PIN 315-092036.**

### In a Remote Extender enclosure with a PS-5N7 used instead of an MMB or PSR:

Connect P2 of the VSM-1/VLM-1/VFM-1 module at the far right in the top row to P4 of the TBM-1/-2, using the 4 foot cable, P/N 600-192258, which is ordered separately. **The cables are polarized; do not force them.**

**NOTE:** The TBM-1/-2 module is located in the enclosure on the right side beneath the PS-5N. **For more details, refer to the PS-5N7 Instructions, P/N 315-092729.**

6. Route the cable wires across the hinge to the back of the enclosure. Do not fasten the cable with a cable anchor until all wiring is complete.

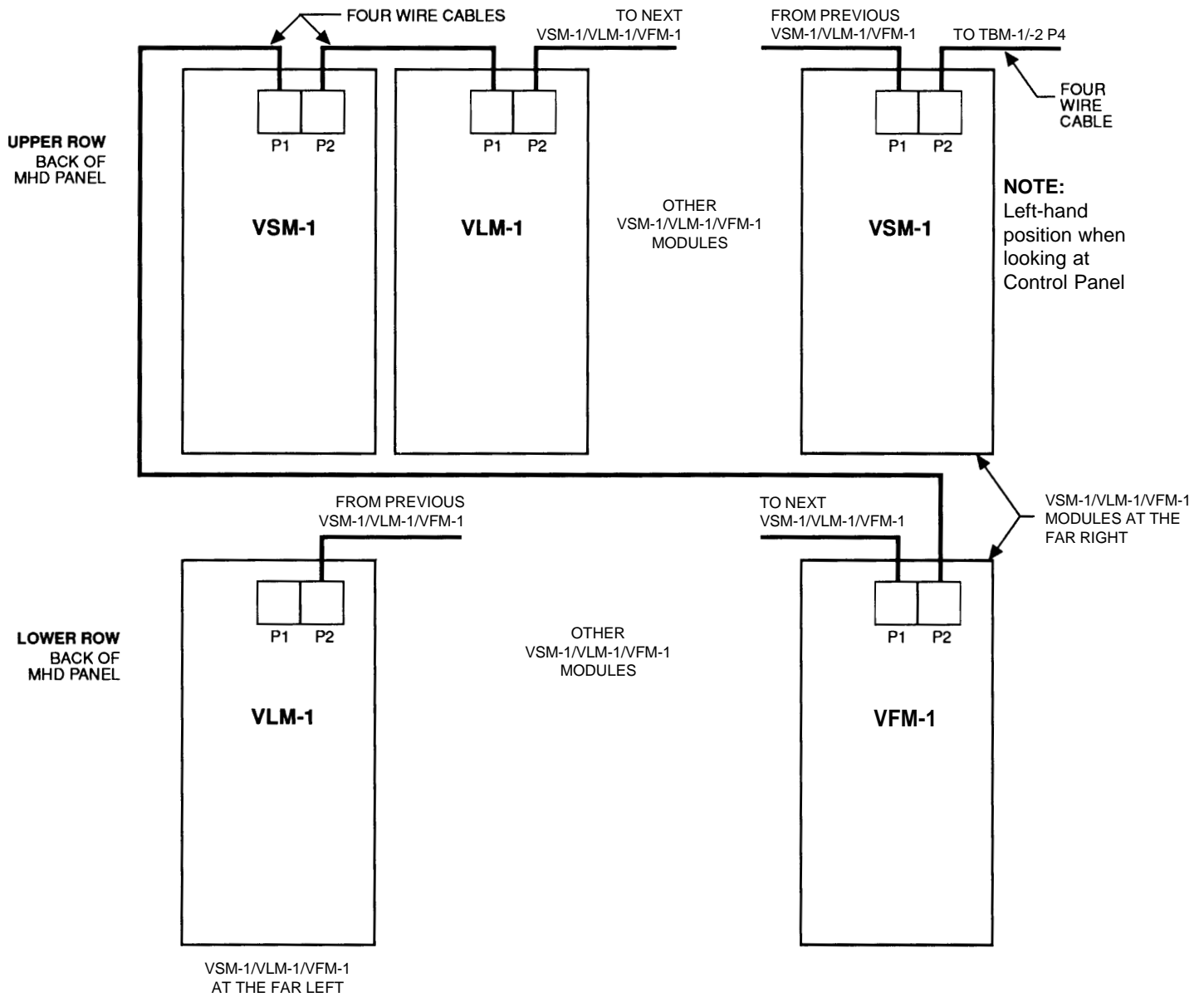
## ELECTRICAL RATINGS

### VSM-1 / VLM-1

Active 5VDC Module Current	0mA
Active 24VDC Module Current	7mA + 11mA per active LED
Standby 24VDC Module Current	7mA + 11mA per active LED

### VFM-1

Active 5VDC Module Current	0mA
Active 24VDC Module Current	10mA + 8mA per active LED
Standby 24VDC Module Current	10mA + 8mA per active LED



**NOTE:** In a Remote Extender module, there may be an additional row of VSMs in the top position.  
*Refer to the ACM-1 Instructions, P/N 315-092083, revision 2 or higher.*

**Figure 3**  
**VSM-1/VLM-1/VFM-1 Wiring Diagram**

This page is intentionally blank.

This page is intentionally blank.

This page is intentionally blank.

---

Siemens Industry, Inc.  
Building Technologies Division  
Florham Park, NJ

P/N 315-092064-9

Siemens Building Technologies, Ltd.  
Fire Safety & Security Products  
2 Kenview Boulevard  
Brampton, Ontario  
L6T 5E4 Canada