

Installation Instructions

Model OCC-1

Output Control Card

INTRODUCTION

The **SIEMENS** Model OCC-1 Output Control Card is an MXLV module that controls Voice system cards (such as the zone cards) that plug into the OMM-1 Output Master module. Commands received from the MXL system through the network bus are processed by the OCC-1. The commands are then sent to the other cards in the system for implementation.

At least one OCC-1 is required in each MXLV System. It supervises and controls up to 11 plug-in cards, each having a unique subaddress. Several types of system cards connect to the OCC-1.

1. Up to three audio risers connect to the OCC-1. These signals are available to the power amplifiers.
2. The BTC-1 Backup Tone card is an optional module that also plugs into the OCC-1. In an installation with distributed amplification, the BTC provides the tone for the degrade mode of operation; then, if Network Communications fail and a local alarm is detected, the tone from BTC-1 is available at the Channel A amplifier input.
3. The telephone riser also connects to the OCC-1. The telephone signal is routed through the OMM-1 telephone riser bus to any ZCT-8B telephone zone control cards that are plugged into the OMM-1.

The OCC-1 supervises the cards under its control, such as the ZC zone card series.

As each card is supervised by the OCC-1, the card responds with its status. The status information is then sent to the MXL.

The OCC-1 occupies a network address. Set the address on switch S1. When installing an OCC-1 card, use the CSG-M (AccuLINK) configuration printout to locate the address of the card. Follow the switch setting instructions in Table 1 to set the desired address.

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

INSTALLATION

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

1. Remove the card from its protective bag. Do not touch the gold edge of the board.
2. Refer to the CSG-M configuration printout for the address of the module.

3. Set the card address on switch S1 using dipswitches SW1-SW8.
 - a. Refer to Figure 1 for the location of switch S1.
 - b. Refer to Table 1 for the switch settings.
 - c. Set the address (See NOTE below).

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.

4. There is a jumper E1 on the OCC-1. Refer to Figure 1 for its location. If the **EL-410C/D amplifier is used**, place jumper E1 in the right-hand position. This connects the backup amplifier input negative side to the MXLV power supply.

5. Switch S2 is not presently used, but it must be left in place.
6. Do NOT install the card in its edge connector until ALL OMM-1/-2 field wiring is completed and checked for shorts, opens, and other faults. Refer to **Wiring** and to the **OCC-1 Wiring Checkout Chart**. Replace the card in its protective bag if the wiring is not complete.
7. Place the user key from the installation kit in the OMM-1/-2 card edge connector for the OCC-1 (See Figure 2). See Figure 3 for the exact location of the key for this module. This prevents installation of any other card type in the OCC-1 slot.

CAUTION

At all times handle any plug-in cards with extreme care. When inserting or removing a card, be sure the card is kept at right angles to the OMM board. Otherwise, the plug-in card can damage or displace other components.

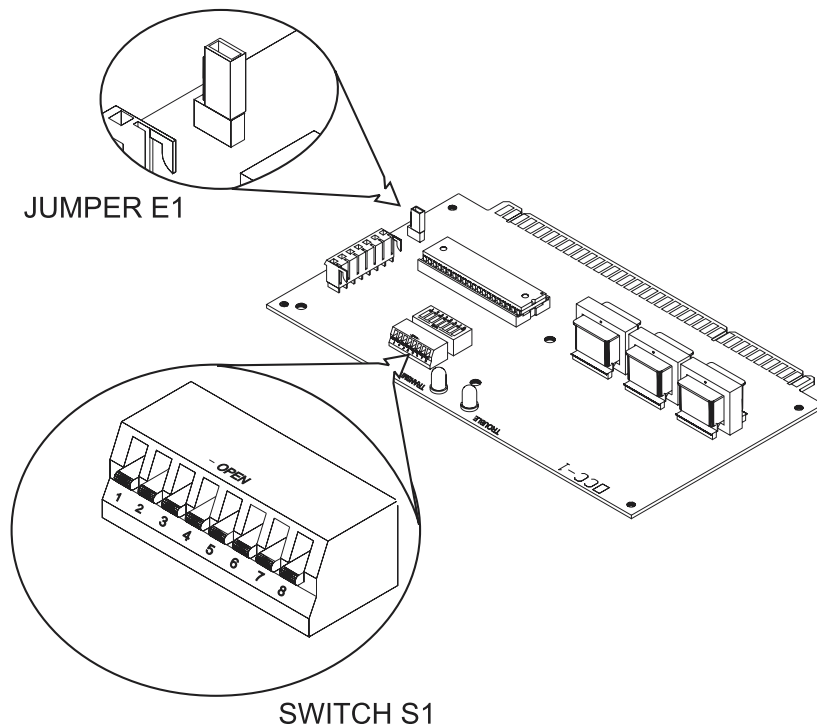


Figure 1
OCC-1 Output Control Card Module

8. Two keys to prevent reverse installation of the card are already factory installed in the OMM-1/-2 edge connectors (See Figure 3).
9. After completing and checking all field wiring, place the card in its card edge connector. The components on the board must face the 22-position terminal block where the wiring is terminated. Press the card firmly in place to be sure it is seated properly in the edge connector.

End of Line Resistors

Audio risers: 10K, 1/2W, 5%
(P/N 140-820396)

Telephone risers: 5.6K, 1/2W, 5%
(P/N 140-820390)

WIRING

(Refer to Figure 4)

All wiring must comply with national and local codes.

Maximum wire size:

14 AWG shielded twisted pair

Minimum wire size:

18 AWG shielded twisted pair

Maximum loop resistance:

20 ohms for both wires

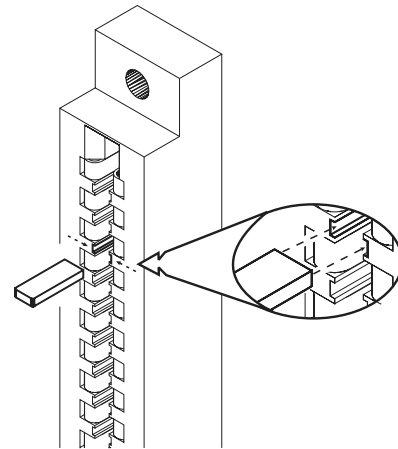


Figure 2
Installing the User Key in the OMM
Card Edge Connector

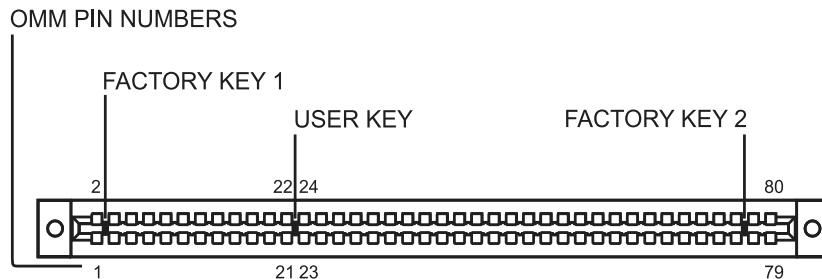
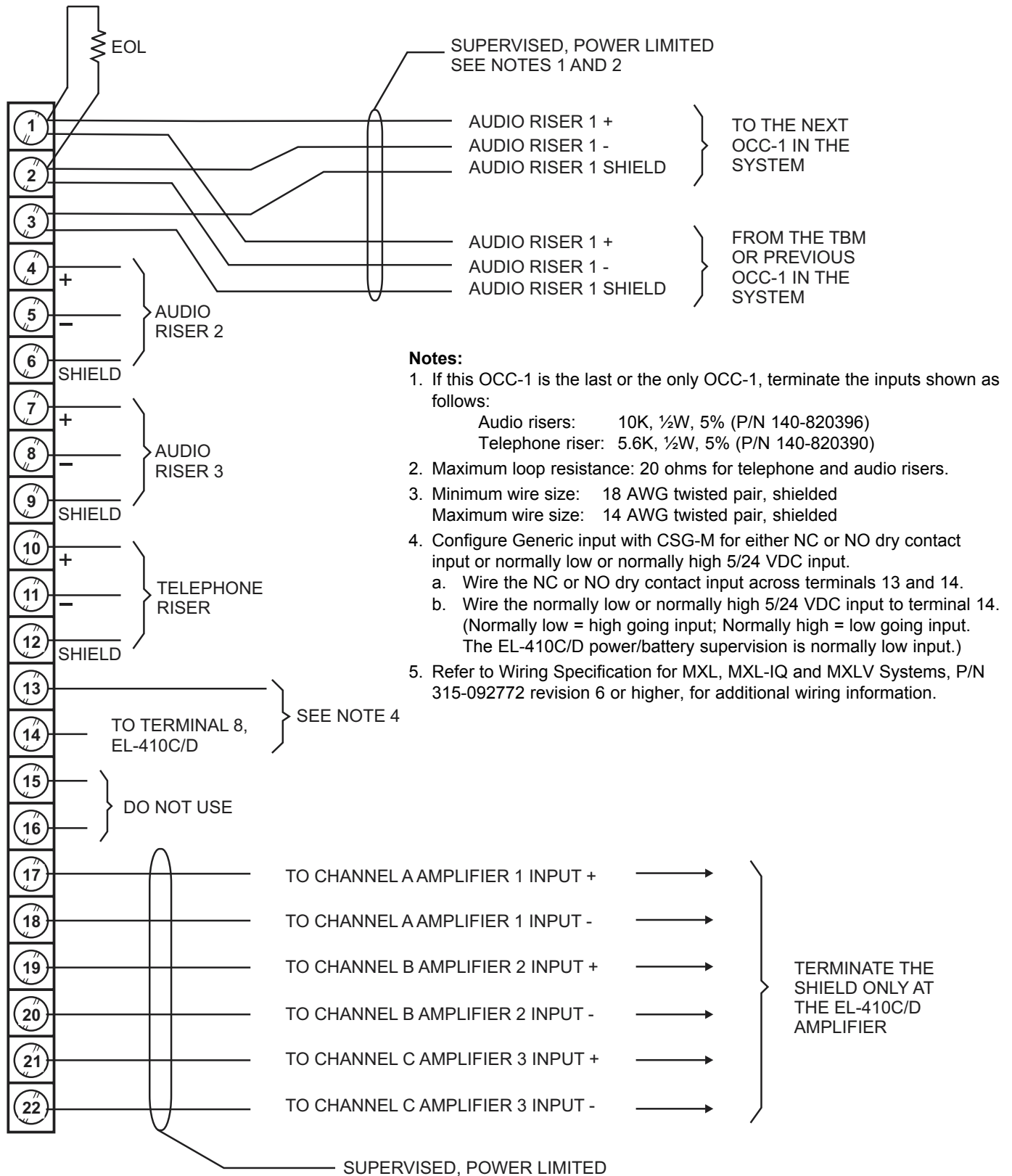


Figure 3
Location of the User Key for the OCC-1

All wiring must conform to National and Local codes.



PLACE AMPLIFIER INPUT AND OUTPUT CABLES
IN SEPERATE CONDUITS

Figure 4
Typical Riser Connections

OCC-1 WIRING CHECKOUT CHART

| Resistance Between Terminals | Resistance Desired | Possible Cause of Problem |
|---|-----------------------|--|
| 1 to 2 4 to 5 7 to 8 | 10K | Line shorted Line open No EOL Wrong EOL |
| 10 to 11 | 5.6K | Line shorted Line open No EOL Wrong EOL |
| 1-22 to chassis | > 1 Meg | Short in wiring |
| 2 to 3 3 to 4 5 to 6 6 to 7 8 to 9 9 to 10 11 to 12 12 to 13 | > 1 Meg | Short in wiring |
| 17 to 18 19 to 20 21 to 22 | > 1 Meg | Line shorted |
| 16 to 17 18 to 19 20 to 21 | > 1 Meg | Short in wiring |

**TABLE 1
NETWORK ADDRESS PROGRAMMING**

| ADDR | 8 7 6 5 4 3 2 1 | ADDR | 8 7 6 5 4 3 2 1 | ADDR | 8 7 6 5 4 3 2 1 | ADDR | 8 7 6 5 4 3 2 1 |
|------|-----------------|------|-----------------|------|-----------------|------|-----------------|
| 000 | ILLEGAL | 064 | OX000000 | 128 | X0000000 | 192 | XX000000 |
| 001 | ILLEGAL | 065 | OX00000X | 129 | X000000X | 193 | XX00000X |
| 002 | ILLEGAL | 066 | OX0000X0 | 130 | X00000X0 | 194 | XX0000X0 |
| 003 | 000000XX | 067 | OX0000XX | 131 | X00000XX | 195 | XX0000XX |
| 004 | 00000X00 | 068 | OX000X00 | 132 | X0000X00 | 196 | XX000X00 |
| 005 | 00000X0X | 069 | OX000X0X | 133 | X0000X0X | 197 | XX000X0X |
| 006 | 00000XX0 | 070 | OX000XX0 | 134 | X0000XX0 | 198 | XX000XX0 |
| 007 | 00000XXX | 071 | OX000XXX | 135 | X0000XXX | 199 | XX000XXX |
| 008 | 0000X000 | 072 | OX00X000 | 136 | X000X000 | 200 | XX00X000 |
| 009 | 0000X00X | 073 | OX00X00X | 137 | X000X00X | 201 | XX00X00X |
| 010 | 0000X0X0 | 074 | OX00X0X0 | 138 | X000X0X0 | 202 | XX00X0X0 |
| 011 | 0000X0XX | 075 | OX00X0XX | 139 | X000X0XX | 203 | XX00X0XX |
| 012 | 0000X000 | 076 | OX00XX00 | 140 | X000XX00 | 204 | XX00XX00 |
| 013 | 0000XX0X | 077 | OX00XX0X | 141 | X000XX0X | 205 | XX00XX0X |
| 014 | 0000XX00 | 078 | OX00XX00 | 142 | X000XX00 | 206 | XX00XX00 |
| 015 | 0000XXX0 | 079 | OX00XXX0 | 143 | X000XXX0 | 207 | XX00XXX0 |
| 016 | 000X0000 | 080 | OX0X0000 | 144 | X00X0000 | 208 | XX0X0000 |
| 017 | 000X000X | 081 | OX0X000X | 145 | X00X000X | 209 | XX0X000X |
| 018 | 000X00X0 | 082 | OX0X00X0 | 146 | X00X00X0 | 210 | XX0X00X0 |
| 019 | 000X00XX | 083 | OX0X00XX | 147 | X00X00XX | 211 | XX0X00XX |
| 020 | 000X0X00 | 084 | OX0X0X00 | 148 | X00X0X00 | 212 | XX0X0X00 |
| 021 | 000X0X0X | 085 | OX0X0X0X | 149 | X00X0X0X | 213 | XX0X0X0X |
| 022 | 000X0XX0 | 086 | OX0X0XX0 | 150 | X00X0XX0 | 214 | XX0X0XX0 |
| 023 | 000X0XXX | 087 | OX0X0XXX | 151 | X00X0XXX | 215 | XX0X0XXX |
| 024 | 000X0000 | 088 | OX0XX000 | 152 | X00XX000 | 216 | XX0XX000 |
| 025 | 000X000X | 089 | OX0XX00X | 153 | X00XX00X | 217 | XX0XX00X |
| 026 | 000X0X00 | 090 | OX0XX0X0 | 154 | X00XX0X0 | 218 | XX0XX0X0 |
| 027 | 000X00XX | 091 | OX0XX0XX | 155 | X00XX0XX | 219 | XX0XX0XX |
| 028 | 000XX000 | 092 | OX0XX000 | 156 | X00XX000 | 220 | XX0XX000 |
| 029 | 000XX00X | 093 | OX0XX00X | 157 | X00XX00X | 221 | XX0XX00X |
| 030 | 000XX0X0 | 094 | OX0XX0X0 | 158 | X00XX0X0 | 222 | XX0XX0X0 |
| 031 | 000XX0XX | 095 | OX0XX0XX | 159 | X00XX0XX | 223 | XX0XX0XX |
| 032 | 00X00000 | 096 | OXX00000 | 160 | XOX00000 | 224 | XXX00000 |
| 033 | 00X0000X | 097 | OXX0000X | 161 | XOX0000X | 225 | XXX0000X |
| 034 | 00X000X0 | 098 | OXX000X0 | 162 | XOX000X0 | 226 | XXX000X0 |
| 035 | 00X000XX | 099 | OXX000XX | 163 | XOX000XX | 227 | XXX000XX |
| 036 | 00X00X00 | 100 | OXX00X00 | 164 | XOX00X00 | 228 | XXX00X00 |
| 037 | 00X00X0X | 101 | OXX00X0X | 165 | XOX00X0X | 229 | XXX00X0X |
| 038 | 00X00XX0 | 102 | OXX00XX0 | 166 | XOX00XX0 | 230 | XXX00XX0 |
| 039 | 00X00XXX | 103 | OXX00XXX | 167 | XOX00XXX | 231 | XXX00XXX |
| 040 | 00X0X000 | 104 | OXX0X000 | 168 | XOX0X000 | 232 | XXX0X000 |
| 041 | 00X0X00X | 105 | OXX0X00X | 169 | XOX0X00X | 233 | XXX0X00X |
| 042 | 00X0X0X0 | 106 | OXX0X0X0 | 170 | XOX0X0X0 | 234 | XXX0X0X0 |
| 043 | 00X0X0XX | 107 | OXX0X0XX | 171 | XOX0X0XX | 235 | XXX0X0XX |
| 044 | 00X0XX00 | 108 | OXX0XX00 | 172 | XOX0XX00 | 236 | XXX0XX00 |
| 045 | 00X0XX0X | 109 | OXX0XX0X | 173 | XOX0XX0X | 237 | XXX0XX0X |
| 046 | 00X0XX00 | 110 | OXX0XX00 | 174 | XOX0XX00 | 238 | XXX0XX00 |
| 047 | 00X0XXX0 | 111 | OXX0XXX0 | 175 | XOX0XXX0 | 239 | XXX0XXX0 |
| 048 | 00XX0000 | 112 | OXXX0000 | 176 | XOXX0000 | 240 | XXX00000 |
| 049 | 00XX000X | 113 | OXXX000X | 177 | XOXX000X | 241 | XXX0000X |
| 050 | 00XX00X0 | 114 | OXXX00X0 | 178 | XOXX00X0 | 242 | XXX000X0 |
| 051 | 00XX00XX | 115 | OXXX00XX | 179 | XOXX00XX | 243 | XXX000XX |
| 052 | 00XX0X00 | 116 | OXXX0X00 | 180 | XOXX0X00 | 244 | XXX0X000 |
| 053 | 00XX0X0X | 117 | OXXX0X0X | 181 | XOXX0X0X | 245 | XXX0X00X |
| 054 | 00XX0XX0 | 118 | OXXX0XX0 | 182 | XOXX0XX0 | 246 | XXX0XX00 |
| 055 | 00XX0XXX | 119 | OXXX0XXX | 183 | XOXX0XXX | 247 | XXX0XXX0 |
| 056 | 00XX0000 | 120 | OXXX0000 | 184 | XOXX0000 | 248 | ILLEGAL |
| 057 | 00XX000X | 121 | OXXX000X | 185 | XOXX000X | 249 | ILLEGAL |
| 058 | 00XX00X0 | 122 | OXXX00X0 | 186 | XOXX00X0 | 250 | ILLEGAL |
| 059 | 00XX00XX | 123 | OXXX00XX | 187 | XOXX00XX | 251 | ILLEGAL |
| 060 | 00XX0X00 | 124 | OXXX0X00 | 188 | XOXX0X00 | 252 | ILLEGAL |
| 061 | 00XX0X0X | 125 | OXXX0X0X | 189 | XOXX0X0X | 253 | ILLEGAL |
| 062 | 00XX0XX0 | 126 | OXXX0XX0 | 190 | XOXX0XX0 | 254 | ILLEGAL |
| 063 | 00XX0XXX | 127 | OXXX0XXX | 191 | XOXX0XXX | 255 | ILLEGAL |

O = OPEN (or OFF) X = CLOSED (or ON)

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