



SCS-1 DIGITAL CENTRAL STATION RECEIVER WITH HOST AUTOMATION OUTPUT

**SECURITY CONTROL RECEIVER
MODEL SCS-1
INSTALLATION AND USER'S GUIDE**

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Revisions to This Document

This section explains the changes that were made to this document during this revision. This section lists the date the change was made, the section number and section heading, and a quick summary of the change.

Date	Section Number and Heading	Quick Explanation of Changes
3/02	Entire Documents	New Layout.
3/02	3.6 iCOM™ Internet Alarm Router	Section added describing using the iCOM with the SCS-1.
3/02	4.4 Alarm Acknowledge	Information added clarify which key acknowledges alarm signals.
3/02	Appendix B	Figure 1 updated to reflect proper configuration of jumpers.

SYSTEM OVERVIEW

1.1 Description

The SCS-1 Receiver system from DMP is comprised of a full featured digital/multiplex and data network capable alarm receiver, a CRT display for viewing incoming reports, a local 80-character printer, and a detachable keyboard for acknowledging reports and configuring the SCS-1 system and components.

1.2 Function

The SCS-1 Receiver system provides central stations with computerized monitoring of DMP Command Processor™ panels. Features of the SCS-1 receiver include automatic logging of alarm, trouble, and supervisory account reports on a local printer with the date and time of their occurrence. The SCS-1 also provides an output to most security automation software packages.

1.3 CRT Display

The CRT display adds flexibility to the SCS-1 system by allowing the operator to view alarm reports before acknowledging them from the system keyboard. A typical account report includes the account number, zone name, and alarm type with the time and date of the occurrence.

Most information is displayed on the CRT screen and printed to the local printer. Opening and Closing reports from monitored accounts provide the operator with the account number, area names and numbers, user name, and the time and date of the occurrence.

1.4 Printer

Routine reports are printed without the need of operator response while non-routine reports are printed and displayed on the CRT for operator acknowledgment.

1.5 Additional Reports

Other reports transmitted to the SCS-1 by DMP Command Processor panels include:

- Addition and deletion of code numbers including the name of the person making the change
- Bypass and reset of zones by name and number including the name of the person making the change
- Schedule changes including the name of the person making the change
- Trouble and Restoral report by zone name and number
- Door access reports including user name and the number of the door being accessed

The **Printout Explanation** section of this guide provides a description of the SCS-1 alarm and activity reports that are printed and displayed.

1.6 Line Capacity

The SCS-1 Receiver accommodates up to five incoming phone lines. Each SCS-1 can be configured with both digital dialer and multiplex receiving lines. Multiplex lines have a capacity of 128 separate accounts. Digital Dialer lines have a capacity of 65,535 separate accounts.

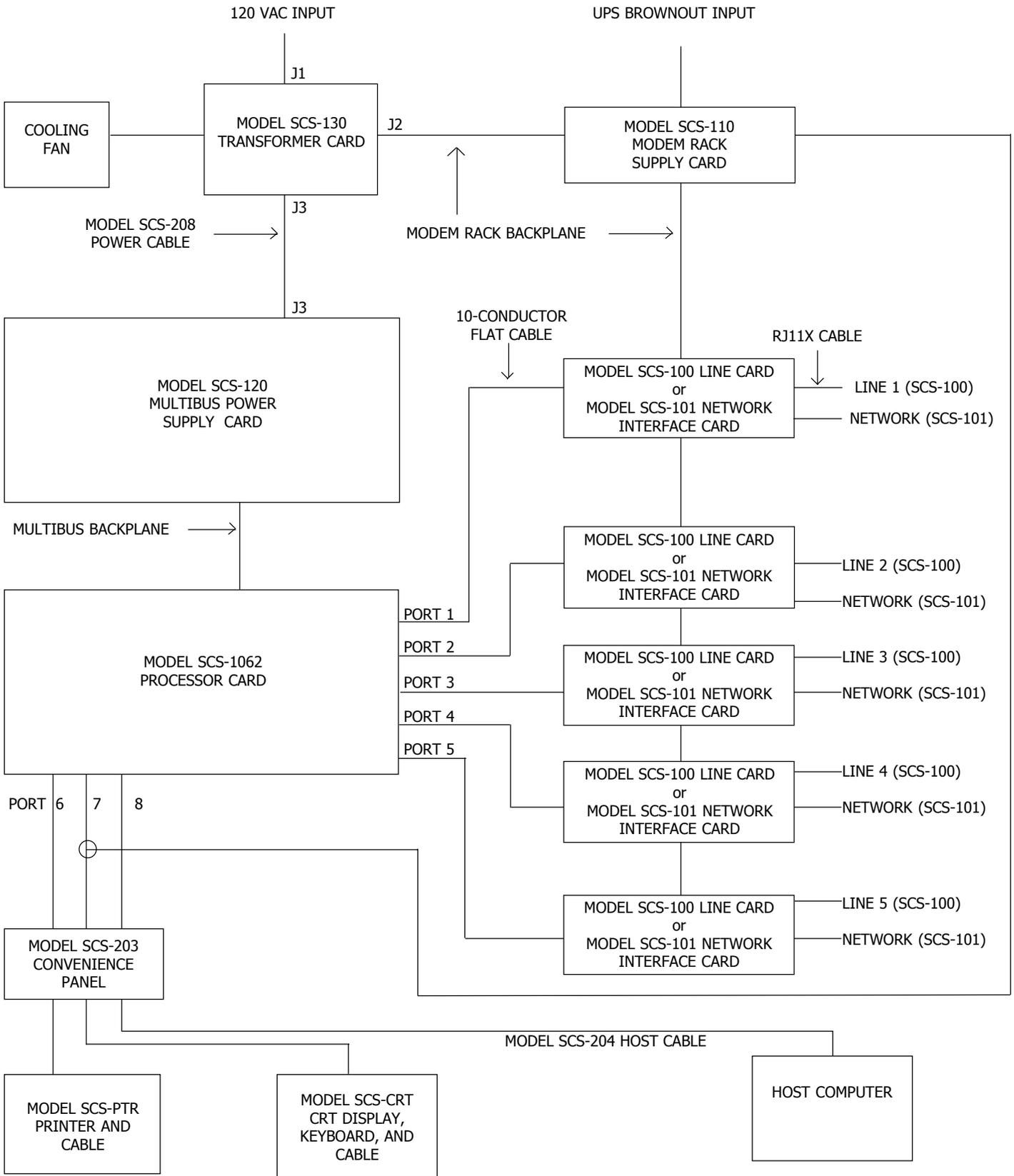
The SCS-101 Network Interface Card allows data network monitoring of 2500 accounts that check-in or up to 65,535 accounts that do not require check-ins.

To select the communication type used on each incoming line, refer to *Configure System* in the **Operator's Guide** section of this guide.

1.7 24-Hour Recall Tests

The automatic recall test from a digital dialer account must be tracked manually or with a listed automation system. The SCS-1 Receiver does not automatically indicate a delinquent recall test. Failure to receive a signal from a Digital Alarm Communicator Panel (DACT) over a 24-hour period is handled by the automation system.

1.8 System Block Diagram



INSTALLATION CHECKLIST

Refer to the **Hardware Description** section of this guide for installation, setup, and operating information.

2.1 Cover Plates

Remove the front plastic cover by twisting each of the four knobs 90 degrees. Remove the two metal rear cover plates. The lower rear cover plate attaches to the three flat cables of the convenience panel.

2.2 Earth Ground

Connect the ground lug on the rear side of the modem rack to earth ground. Using a minimum of 14 gauge wire, ground to a cold water pipe or a ground rod. Do not ground to electrical conduit or telephone company ground.

2.3 Location of Circuit Boards

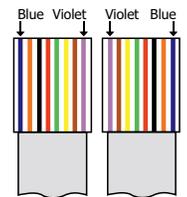
Confirm the circuit boards in the modem rack and in the multibus rack are installed properly and are in their proper locations. The circuit boards are properly installed when completely seated into the connector on the backplane of the rack. Connect all line card and any network interface card flat cables to the SCS-1062 Processor Card ports.

2.4 SCS-208 Power Cord

Connect the SCS-208 Power Cord from the SCS-120 Multibus Power Supply card to the SCS-130 Transformer Card.

2.5 Phone Lines

Connect the RJ11X cables provided with each line card to the phone lines used for receiving alarms. The included phone cables are crossover cables. When you hold the two connectors of one cable side by side the wire colors should be mirror images, as shown in the diagram.



2.6 Network Connection

When using a network interface card, connect the network cable of the SCS-101 to the data network. Refer to the **Hardware Description** and **Appendix B** for SCS-101 network installation instructions.

2.7 AC Power



Connect wiring (hardwired by electrician) for 120 VAC to the SCS-130 Transformer Card mounted on the rear of the modem rack. **Do not apply AC power yet.** For UL Listed operation, use a UL Listed uninterruptible power supply (UPS). The UPS system must have a secondary power source (batteries) and provide alarm contacts to indicate when the UPS switches from primary power to secondary power. The SCS-1 Receiver requires a UPS that delivers at least 400VA of power.

2.8 Front and Rear Covers

Replace the front plastic cover and the two metal rear covers. The louvered rear cover mounts on top.

2.9 CRT Display

Connect the CRT, keyboard, and supplied RS-232 cable. Connect the CRT to AC power and turn on the CRT power switch. The CRT must be located adjacent to the SCS-201 Cabinet for UL Listed operation.

2.10 Printer

Connect the supplied RS-232 printer cable. Install paper, connect the printer to AC power, and turn on the printer power switch.

2.11 Start up

Apply 120 VAC to the transformer card. The 120 volts supplied to the receiver, the CRT display, and the printer must be from the same UPS circuit.

2.12 Configuration

After powering up the system, set the correct time, configure the phone lines and network communications, and enter the operator codes. Refer to the **Operator's Guide** section of this guide for instructions on completing these tasks.

MODEL SCS-1 SECURITY CONTROL RECEIVER

3.1 Description

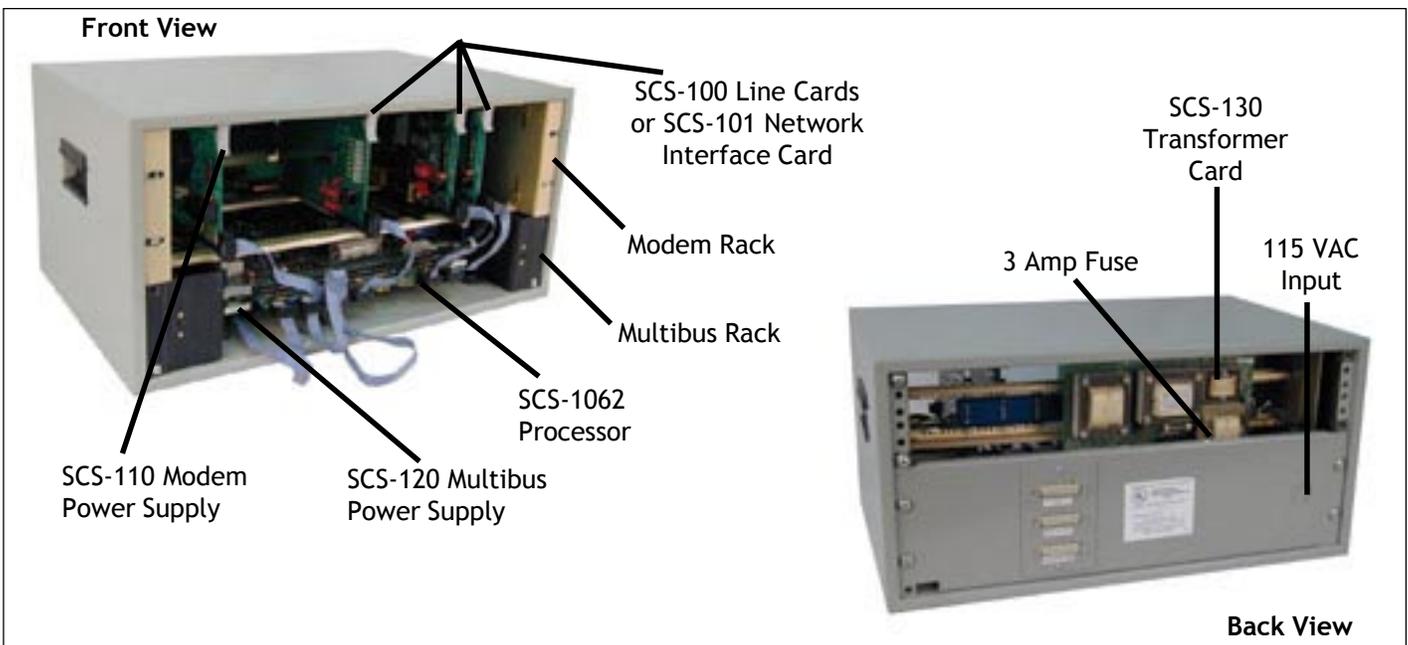
The DMP SCS-1 Receiver as shipped from the factory includes all of the necessary system components to provide two lines of receiving capability. This package can be expanded to include a maximum of five incoming phone lines. The SCS-101 Network Interface Card allows you to connect a digital data network to the SCS-1 Receiver. An SCS-101 can be installed in place of any SCS-100 Line Card. The SCS-1 includes the following:

Quantity	Model Number	Name	Quantity	Model Number	Name
1	SCS-201	System Enclosure	1	SCS-120	Multibus Power Supply
1	SCS-1062	Processor Card	1	SCS-130	Transformer Card
2	SCS-100	Line Card (5 Line Cards max.)	1	SCS-208	Power Distribution Cord
Optional	SCS-101	Network Interface Card (replaces SCS-100 Line Cards)	1	SCS-203	Convenience Panel
1	SCS-110	Modem Power Supply Card	1	SCS-PTR	Printer and Cable
			1	SCS-CRT	CRT, Keyboard, & Cable
			Optional	SCS-204	Host Computer Cable

MODEL SCS-201 SYSTEM ENCLOSURE

3.2 Description

The SCS-201 provides housing for the receiver processor, power supply, line cards, and associated cables. The enclosure measures 13" deep, 10" high, and 20" wide.



3.2.1 Modem Rack

Contained in the top of the System Enclosure is a 5.25" modem rack. The rack holds the modem power supply card and up to five line cards. The transformer card for connecting the 120 VAC is mounted on the rear of the modem rack.

3.2.2 Multibus Rack

Contained in the bottom of the System Enclosure is a 3.5" multibus rack with cooling fan. The multibus rack holds the processor card and the multibus power supply card.

3.2.3 Installation

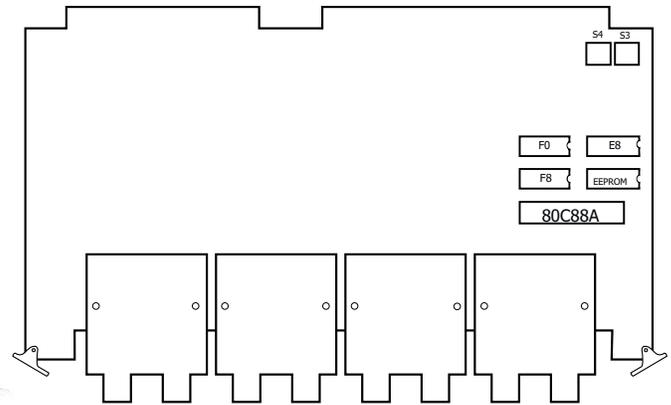
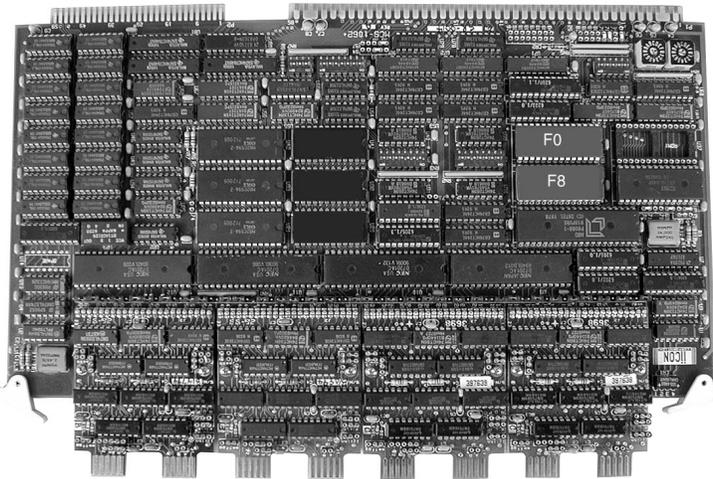


Connect the System Enclosure to earth ground before making any connections to the modules. Use a minimum 14 gauge wire for grounding. A crimp type spade connector is provided for connecting the ground wire to the ground lug on the modem rack.

MODEL SCS-1062 PROCESSOR CARD

3.3 Description

The SCS-1062 is the main system processor that controls the line cards, the CRT display, and the printer. The SCS-1062 contains the firmware for system operation, the EEPROM memory of operator codes, the line configuration, and also all time keeping functions.



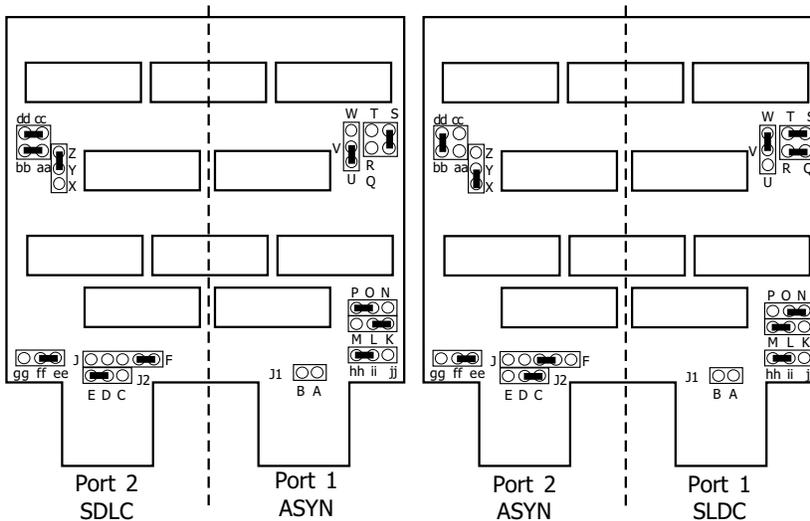
Port Descriptions

- 1 - SCS- 100 Line 1
- 2 - SCS- 100 Line 2
- 3 - SCS- 100 Line 3
- 4 - SCS- 100 Line 4
- 5 - SCS- 100 Line 5
- 6 - SCS - PTR (printer)
- 7 - SCS - VPT1 (CRT and keyboard)
- 8 - Host Computer

3.3.1 Configuration

Before installing the SCS-1062 Processor Card, configure the jumpers for the desired communication type. Ports 6, 7, and 8 have been preset in the factory for proper operation with the printer, CRT and keyboard, and the host Computer respectively. If you are setting a port for Host (ASYN) communication, match the jumpers on the desired port to the preset jumpers on port 6. Refer to the diagram below when configuring the ports for ASYN or SDLC. Also set the line jumpers according to the positions listed in the table below. For more information about configuring line and port jumpers, refer to Appendix B.

Note: If you are updating from firmware version 808 or older, refer to **Appendix C: SCS-1062 PROM Placement**.



	For SDLC	For ASYN
Line 1	1, 4, 6, 8	2, 3, 6, 8
Line 2	9, 11, 13, 16	9, 11, 14, 15
Line 3	17, 20, 22, 24	18, 19, 22, 24
Line 4	25, 27, 29, 32	25, 27, 30, 31
Line 5	33, 36, 38, 40	34, 35, 38, 40

3.3.2 Installation

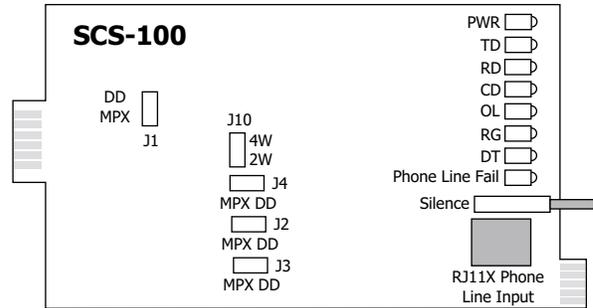


Always remove power to the receiver when installing or removing the SCS-1062. After setting the port jumpers and line jumpers, install the board component side up in the lower position of the multibus rack. Install the convenience panel connectors on ports 6, 7, and 8 and the line card flat cables on ports 1 to 5.

MODEL SCS-100 LINE CARD

3.4 Description

The SCS-100 provides for one incoming line of either digital dialer or multiplex communication to DMP command processor panels. Each line card includes one 10-position flat cable for connection to the processor card, and one RJ11X cable for connection of a phone line from a customer supplied RJ11X connection block.



3.4.1 Configuration for MPX or DD

The SCS-100 can be used for either digital dialer (DD) or multiplex (MPX) communication. The SCS-100 is configured in the factory for DD. To change the configuration, set the four jumpers labeled J1, J2, J3, and J4 to the appropriate position printed on the PCB. For multiplex communication, set the jumper labeled J10 for either 2-wire or 4-wire operation. For 4-wire operation, the yellow and black wires of the RJ11X cable become the receive pair for multiplex.

Always set jumper J10 for 2-wire operation when using digital dialer communication.

3.4.2 Card Installation

Install the SCS-100 in any one of the five right hand positions of the modem rack with the card puller in the up position. Connect the 10-position flat cable between the line card and the processor card.

PIN 1 OF THE FLAT CABLE CONNECTOR MUST BE IN THE SAME POSITION ON BOTH THE LINE CARD AND THE PROCESSOR CARD.

The line number of the line card is determined by the processor card port number.

3.4.3 Phone Line Installation

Install the RJ11X cable provided with the line card between the RJ11X connector on the front of the line card to a customer supplied RJ jack. Use a standard 103J voice grade (analog) line. A slot is provided in the receiver back plate for the RJ11X cable to pass through.

The SCS-100 is registered with the FCC, registration number CCK8GW-16197-AL-N; Ringer Equivalence 1.2.

3.4.4 Phone Line Monitor

The incoming phone line voltage is monitored when the Line Card is configured for digital dialer operation. During a loss of phone line voltage, the red Phone Line Fail LED is lit and the alert sounds. The alert can be silenced by pressing the silence switch on the line card. The LED remains lit until the phone line is restored.

3.4.5 Power Monitor LED

The green LED labeled PWR is lit when the power supply on the line card is working properly.

3.4.6 Data Communication LEDs

The six yellow LEDs indicate the condition of the line card during the various stages of communication.

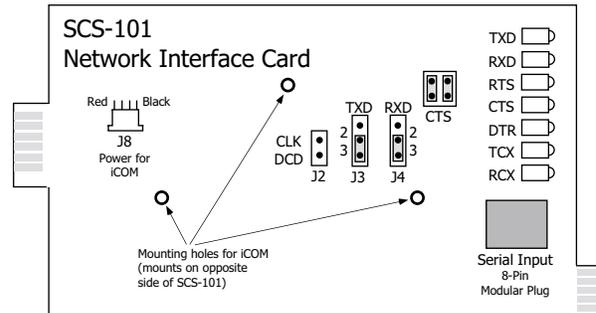
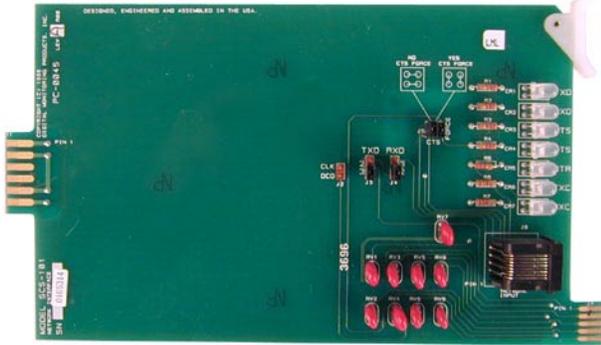
A description of each LED is listed below:

TD	Transmit Data	On when the line card is transmitting to a panel.
RD	Receive Data	On when the line card is receiving data from a panel.
CD	Carrier Detect	On when the carrier tone from the panel is detected on the phone line.
OL	On Line	On when a line card configured for digital dialer has answered the phone line. Not used for MPX.
RG	Ring Detect	On when ringing voltage is detected on phone line. Not used for MPX.
DT	Data Terminal Ready	On when the line card is ready to receive.

MODEL SCS-101 NETWORK INTERFACE CARD

3.5 Description

The SCS-101 provides for a connection from a digital data network to a port on the SCS-1. Each card includes one 10-position, 6-inch flat cable for connection to the processor card, and one 8-pin modular connector for connection to a digital data network. This allows the receiver to accept alarm and system reports over a network from DMP Command Processor panels. With an iCOM™ Internet Router installed on the SCS-101 card, the SCS-1 Receiver is able to monitor alarm and other panel messages through an Internet connection.



3.5.1 Configuration

Set the data jumpers to their correct configurations *before* installing the SCS-101 into the receiver chassis. The following sections describe the data jumper setting options.

FORCE CTS

This jumper allows the SCS-101 to either pass-through or tie the CTS and RTS data lines together. If your network *does not* support a Clear To Send and Request To Send signal, set the FORCE CTS jumpers vertically. If your network *does* supply these signals, set the jumpers horizontally.

RXD and TXD

The factory setting is Transmit Data on pin #3 and Receive Data on pin #3 when using the DMP Model 390 Network Cable. These jumpers can be changed to fit the needs of your network.

3.5.2 Installation

After setting the data jumpers, install the SCS-101 in any one of the five right hand positions of the modem rack with the card puller in the up position. Connect the 10-position flat cable between the network interface card and the processor card.

3.5.3 Network Compatibility

The SCS-101 is compatible with DMP iCOM™ Internet Routers, Ether-Com™ and Ether-Com XR™ Single Port Routers.

3.5.4 LED Indicators

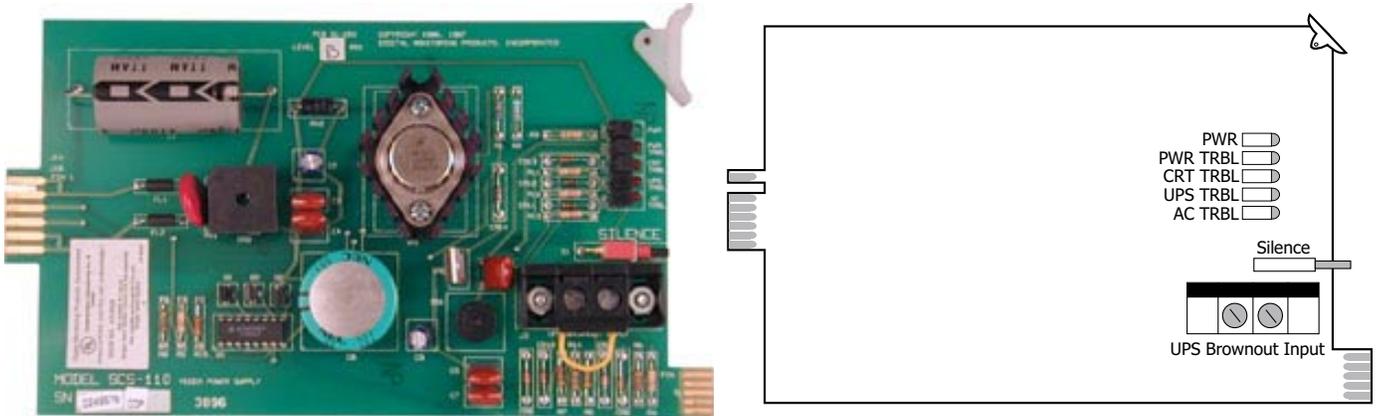
The seven bi-color LEDs indicate the condition of the network interface card during the various stages of communication. A description of each LED is listed below:

TXD	Transmit Data	
RXD	Receive Data	
RTS	Ready To Send	
CTS	Clear To Send	
DTR	Data Terminal Ready	
TXC	*Transmit Clock	* If the clock signal is present, both red and green
RXC	*Receive Clock	segments of the LEDs are lit.

MODEL SCS-110 MODEM POWER SUPPLY CARD

3.7 Description

The SCS-110 provides power to a maximum of five line cards. Power is supplied through the modem rack backplane connectors without additional cabling. The SCS-110 also provides monitoring for the CRT connection, UPS system status, and the 120 VAC input to the SCS-1 receiver.



3.7.1 Installation



Always remove power to the receiver when installing or removing the SCS-110. Install the SCS-110 with the card puller up in the far left hand position of the modem rack. Plug the flat cable from the SCS-203 convenience panel onto the card edge connector at the bottom of the SCS-110.

3.7.2 Power Monitor LEDs

The green LED labeled PWR lights when the power supply to the SCS-110 is working properly. The red LED labeled PWR TRBL is controlled by the SCS-120 Multibus Power Supply Card and lights when there is a power problem on the SCS-110. The red LED remains lit until the power problem is corrected. The alert tone on the multibus Power Supply Card sounds during a power problem and can be silenced by pressing the silence switch.

3.7.3 CRT Trouble LED

The CRT trouble LED lights and the alert tone sounds when the CRT is turned off or the CRT cable is unplugged. The alert tone is silenced by pressing the silence button on the SCS-110.

3.7.4 UPS Trouble LED

The UPS (Uninterrupted Power Supply) trouble LED lights and the alert tone sounds when the UPS Brownout Input is opened. Connect this circuit to the brownout contacts on your UPS system (Refer to SCS-130 information). No End of Line resistor is needed. Silence the alert tone by pressing the silence button on the SCS-110.

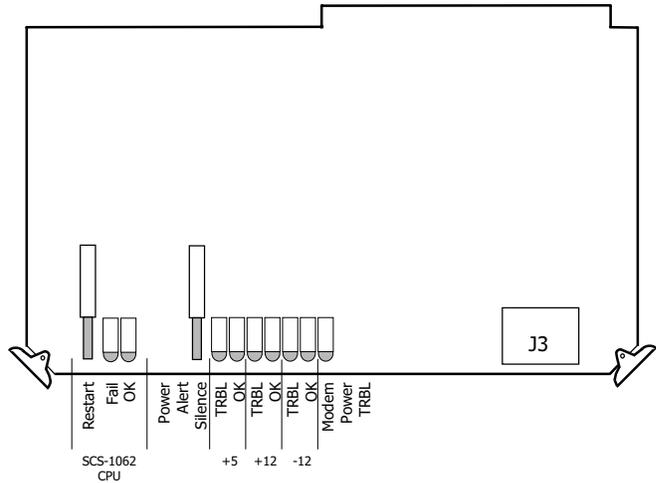
3.7.5 AC Trouble LED

The AC trouble LED lights and the alert tone sounds when AC power to the SCS-130 Transformer Card fails. Silence the alert tone by pressing the silence button on the SCS-110.

MODEL SCS-120 MULTIBUS POWER SUPPLY CARD

3.8 Description

The SCS-120 provides power to the SCS-1062 Processor Card through the multibus backplane. The SCS-120 also monitors the condition of the SCS-1062 Processor Card, the voltage output of the SCS-110 Modem Power Supply Card, and its own internal voltages.



3.8.1 Installation



Always disconnect power to the receiver when installing or removing the SCS-120. Install the board with the component side up in the upper position of the multibus rack. Connect the SCS-208 Power Cable to J3 on the front right side of the card. Connect the other end of the power cable to the transformer card on the back of the modem rack. The power cable can be used in either direction.

3.8.2 Processor Monitor

The SCS-120 monitors the processor of the Model SCS-1062 through the multibus backplane. The green OK LED lights when the processor is operating. If the processor stops operating, the red FAIL LED lights and the failure buzzer on the SCS-120 sounds. Press the processor restart button to restart the system, silence the buzzer, and turn off the red LED. The restart button restarts the system and resets the time of day. All other system configuration information is not changed.

3.8.3 Power Monitor LEDs

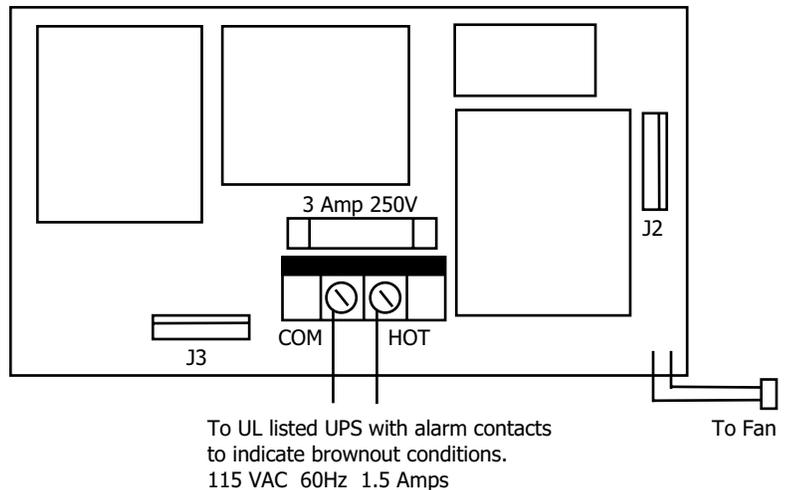
The SCS-120 monitors three different system voltages, +5, +12, -12 and the modem power supply. Four LEDs located to the right of the power alert silence switch displays any voltage failures. A green OK LED lights when the voltages are working properly. The green PWR LED for the modem power supply is located on the SCS-110 Modem Power Supply Card. The red TRBL LED lights and the trouble alert tone on the SCS-120 sounds when there is a problem with a voltage level.

Press the power alert silence switch to silence the alert tone. The red TRBL LED remains lit until the power problem is corrected. The modem power LED, the trouble alert tone on the SCS-120, and the power alert LED on the SCS-110 Modem Power Supply Card all operate together.

MODEL SCS-130 TRANSFORMER CARD

3.9 Description

The SCS-130 provides power to the SCS-110 Modem Power Supply Card and the SCS-120 Multibus Power Supply Card. Two terminals are provided for connecting 120 VAC to the system. A power cord is provided for connecting the multibus rack cooling fan.



3.9.1 Installation



Always remove power to the receiver when installing or removing the SCS-130. Install the SCS-130 with J2 on the right side to the rear of the modem rack and J3 on the bottom as shown above. Four standoffs and four 6-32 screws with lock washers are provided. Connect the SCS-208 Power Cable to J3 on the bottom left of the SCS-130 Transformer Card. Connect the other end of the power cable to the SCS-120 Multibus Power Supply. The power cable can be used in either direction. Connect the cable from the right end of the modem rack labeled J2 to J2 on the right side of the SCS-130 Transformer Card. Connect the 2-conductor cables labeled TO FAN to the multibus cooling fan on the lower right side of multibus rack.

3.9.2 AC Power Connection

Connect 120 VAC to the receiver through the SCS-130 Transformer Card. The receiver backplate provides a 7/8" conduit knockout. AC power connects to the 2-position terminal strip on the bottom of the transformer card. The AC power must be provided by a UL listed UPS. A signal shall be provided at the operators console when the UPS power source switches from primary power to secondary power.

Use a minimum 14 gauge wire and 1/2" conduit when connecting the 120 VAC power to the receiver. Be sure the plastic

cover is replaced on the terminal strip after connecting the AC wiring.

DO NOT APPLY POWER TO THE RECEIVER UNTIL BOTH REAR COVERS ARE REPLACED ON THE RECEIVER CABINET.

3.9.3 Three Amp Fuse

The 120 VAC connection to the receiver is current limited with a DMP Model 319, 3 Amp 250 volt fuse. The 3 Amp fuse is a Type AGC 1/4" x 1 1/4" fast blow.

MODEL SCS-208 POWER CABLE

3.10 Description and Installation

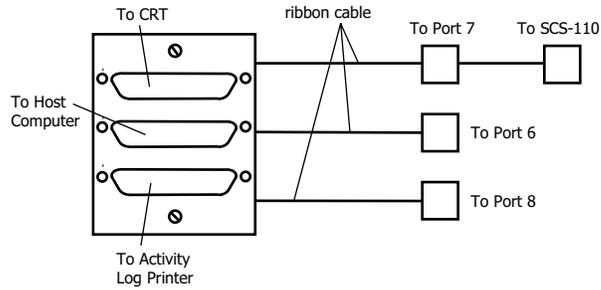
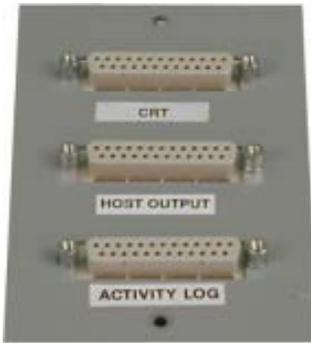
The SCS-208 is a 2-foot cable that connects the different system voltages between J3 of the SCS-130 Transformer Card and J3 of the SCS-120 Multibus Power Supply Card. The SCS-208 cable can be used in either direction, but is polarized on each end for proper installation to the J3 connectors.



MODEL SCS-203 CONVENIENCE PANEL

3.11 Description

The SCS-203 provides cabling for three RS-232 ports. The three ports are for the CRT display, host output, and an activity log printer.



3.11.1 Installation

Install the three 10-position flat cable connectors to ports 6, 7, and 8 of the SCS-1062 Processor Card. Install the metal plate with the three 25-position RS-232 connectors on the receiver backplate using the two 6-32 x 1/4" screws provided. Connect the CRT display, printer, and host computer to the appropriate RS-232 connectors using the included cables.

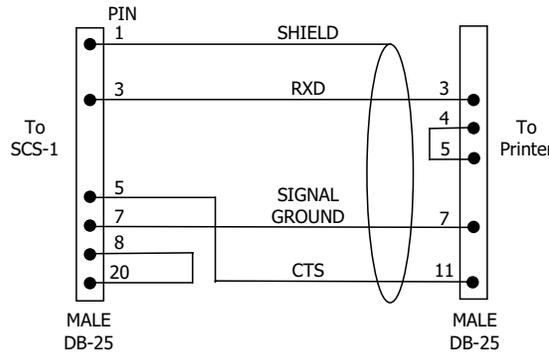
MODEL SCS-PTR PRINTER AND CABLE

3.12 Description

The SCS-PTR is an 80-column printer with a 10-foot RS-232 cable. The SCS-1 is shipped with one printer.

3.12.1 Installation

The printer is shipped from DMP with all option switches preset. Install the RS-232 cable from the printer serial interface port to the receiver convenience panel connector. Remove the shunt plug from the printer output connector. If a printer is not being installed, the shunt plug (shorting pins 4 and 5) should remain on the connector.



THE END OF THE CABLE MARKED "PRINTER" MUST BE INSTALLED INTO THE PRINTER.

3.12.2 Printer Configuration

Verify the printer option switches on the Okidata ML 184T are set according to the information below.

UPPER SERIAL BOARD

Switch Bank 1

- 1 OFF EVEN PARITY
- 2 ON WITHOUT PARITY
- 3 ON 8 BITS
- 4 ON READY/BUSY
- 5 ON CIRCUIT/MONITOR
- 6 ON PRINT MODE
- 7 OFF
- 8 ON

Switch Bank 2

- 1 ON
- 2 ON 1200 BAUD
- 3 OFF
- 4 OFF DSR
- 5 ON 32 BYTES BUFFER
- 6 ON 200ms BUSY SIGNAL
- 7 OFF DTR
- 8 OFF NOT USED

LOWER CONTROL BOARD

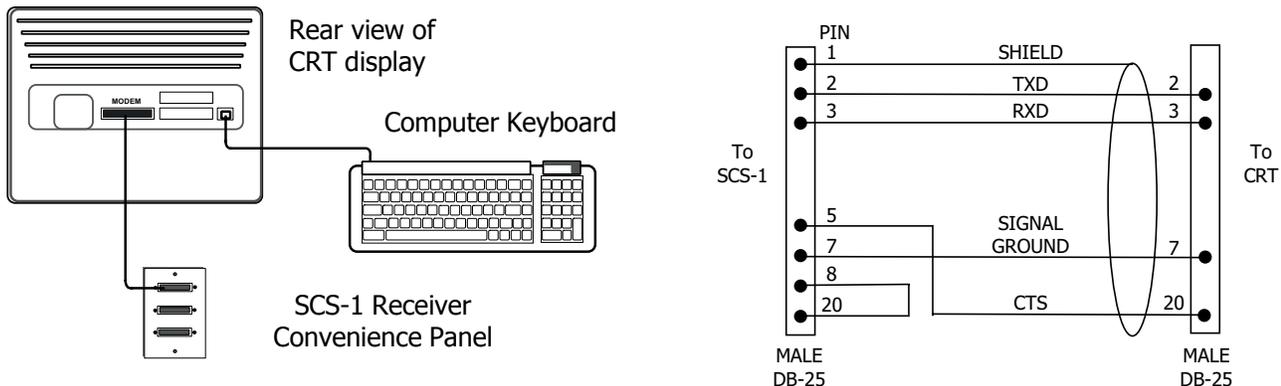
Switch Bank 1

- 1 OFF
- 2 OFF ASCII
- 3 OFF
- 4 OFF
- 5 ON
- 6 ON AUTO LINE FEED
- 7 ON 8 BITS
- 8 OFF ENABLE FRONT PANEL

MODEL SCS-CRT VIDEO DISPLAY, KEYBOARD, AND CABLE

3.13 Description

The Model SCS-CRT is a two-color CRT display with keyboard and a 10-foot RS-232 cable.



3.13.1 Installation

The CRT display is shipped from DMP with the internal Setup Menu options preset. To connect the CRT to the receiver, install the RS-232 cable from the CRT display Modem port to the top connector on the receiver convenience panel. See the diagram above.

THE END OF THE CABLE MARKED "CRT" MUST BE INSTALLED INTO THE CRT.

3.13.2 CRT Configuration

The Setup Menu is used to configure the display and keyboard system. To access the Setup Menu, hold down the **Shift** key while pressing the **Setup** key. To configure the display, select each of the menus (F1 through F7) on the bottom line of the display and set the following special parameters.

F1 = Display Menu	F2 = General Menu	F3 = Keyboard Menu	F4 = Comm Menu
Columns = 80	Personality = Wyse 50	Keyclick = Off	Comm = FDX
Lines = 24	Scrl = Jump	Keylock = Caps	Mdm Rc Hsk = DTR
Page = 1xLines	Rcv CR = CR	Repeat = Off	Aux Rc Hsk = None
Cursor = Blink Blk	Enhance = Off	Language = US	Xmt Lim = None
Display = Dark	Autoscr1 = Off	Keycode = ASCII	Mdm Rc Hsk Level = 192
Autopage = Off	Monitor = Off	Corner Key = Funct	Send ACK = On
Scrn Saver = Off	Status Line = Off	Codepg = PC Wyse ASCII	Answerback Mode = Off
Char Cell = 10x15	Wrap EOL = On	ASCII = National 7-bit	Mdm Xmt Hsk = None
80/132 = Off	Recognize DEL = Off	ASCII Font = WY ASCII	Aux Xmt Hsk = None
Down Key = CTRL V			

F5 = Port Menu	F6 = Misc Menu	F7 = ANSI 1 Menu	F8 = ANSI 2 Menu
Mdm Baud Rate = 9600	WPRT Intensity = Dim	Char Set = Multinational	Print = ASCII
Aux Baud Rate = 9600	Blk End = US/CR	Cursor Keys = Normal	Send = All
Host Port = Modem Port	Margin Bell = Off	Feature Lock = Off	Xfer Term = EOS
Mdm Data/Parity = 8/None	WPTR Rev = Off	Char Mode = National	Print Area = Page
Aux Data/Parity = 8/None	Attribute = Page	Keypad = Application	Send Area = Page
Printer Attached = Off	Bell Volume = 3	Fkey Lock = Off	Auto Answerback = Off
Mdm Stop Bits = 1	WPRT Undrln = Off	ANSI ID = VT 100	Print Term = None
Aux Stop Bits = 1	Multiple Page = Off	DEL = DEL/CAN	Send Term = None
Null Suppress = On	Rest/Act. Times = None	Newline = Off	Keys = Typewriter

Note: Do not change any of the parameters for menus F1 through F7 or any in menu F8 through F11.

To exit the Setup Menu press F12. After you have configured the system and exited the Setup Menu, press the Caps Lock key.

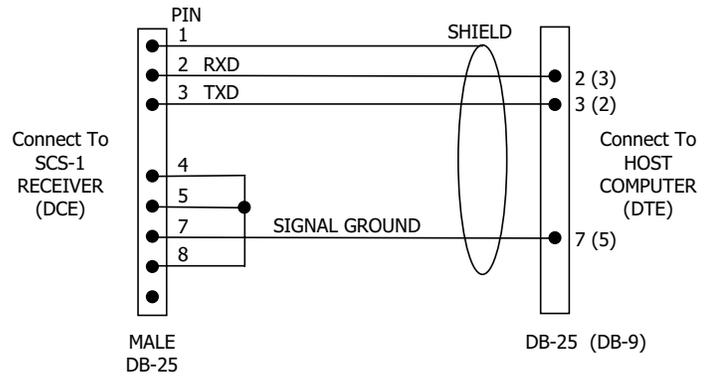
MODEL SCS-204 HOST CABLE

3.14 Description

The SCS-204 is a 10-foot RS-232 cable that connects a host computer to the SCS-1 Receiver.

3.14.1 Installation

Connect the SCS-204 cable from a host computer to the SCS-1 Convenience Panel center connector marked "HOST".



THE END OF THE CABLE MARKED "HOST" MUST BE INSTALLED INTO THE HOST COMPUTER.

OPTIONAL MOUNTING

3.15 Rack Mounting

The SCS-1 can be mounted in a standard 19" rack. Follow the instructions below for disassembly and rack mounting.

Convenience panel (SCS-203) removal

1. Remove the Convenience Panel from the rear panel of the SCS-1 enclosure by removing the two screws.
2. Disconnect the three 10-pin ribbon cables from the convenience panel.
3. The Convenience Panel needs to be mounted to the back of the rack behind the modem and multibus racks.
4. Mount the Convenience Panel in the rack so that the ribbon cables reach the Multibus processor card connectors J6, J7, and J8.

SCS-1 Enclosure removal

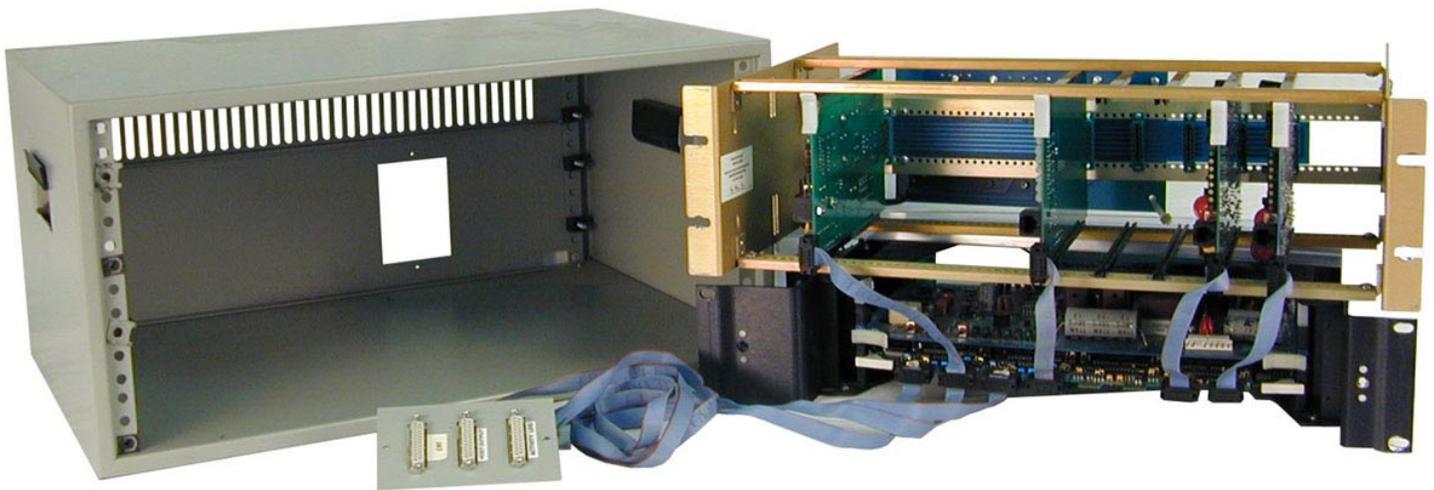
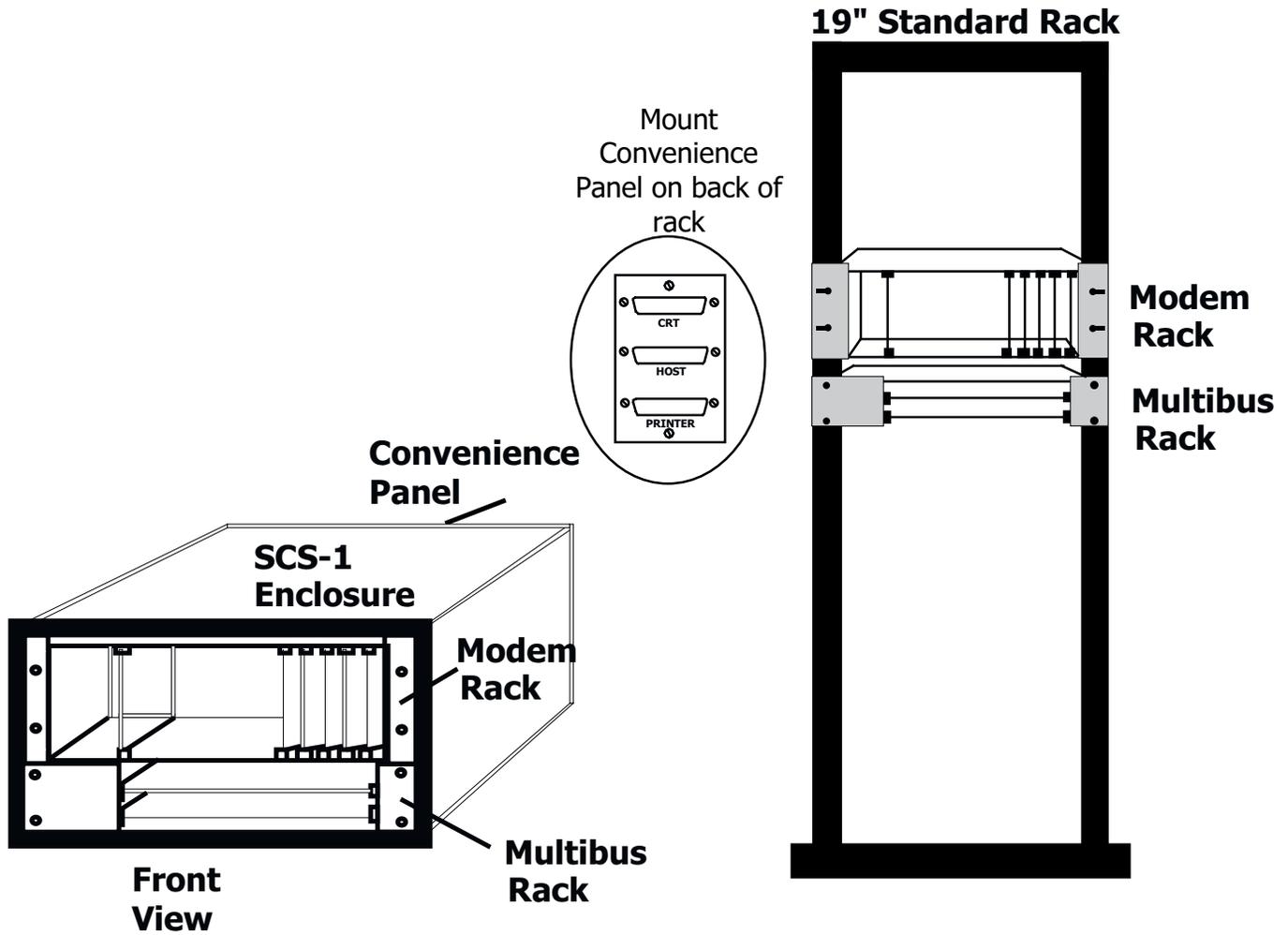
1. Remove the Modem Rack and Multibus Rack from the SCS-1 enclosure by loosening the four front panel mounting screws from each unit. See the figure on the following page.

Rack installation

1. Place the Modem Rack and Multibus Rack into a standard 19" rack and insert four screws into the front panel of each unit.
2. Attach the three 10-pin ribbon cables from the Multibus Rack processor board J6, J7, and J8 to the Convenience Panel.

Refer to the following page for rack mount diagrams.

3.15.1 Rack Mount Diagram



OPERATOR'S GUIDE**4.1 Security Control Terms**

This is an alphabetical list of terms used in the SCS-1 Receiver system operating instructions. Refer to these explanations for additional information.

ACK	A key located on the keyboard used to acknowledge messages as they are displayed on the CRT.
Alphanumeric	A set of characters consisting of either the letters A through Z, the digits 0 through 9, special symbols, or a combination of all of these. For example, the set of characters "AB76#2," is alphanumeric.
Character	One of a set of symbols that can be arranged in groups to express information. This includes the digits 0 through 9, the letters A through Z, punctuation marks, and other special symbols.
Command Processor Programs	The data programmed into a DMP Command Processor™ panel at the time of installation. A typical program includes: communication information, system options, area information, zone information, and the number and type of Security Command® keypads in the system. This should not be confused with System Programs that are software routines used by the SCS-1 to execute functions described in the Operations Manual.
CRT	A computer monitor used to display information and a computer keyboard that allows you to enter information.
Cursor	A flashing underline symbol on the CRT display for use when entering or changing information.
Default Value	A value assigned to a field by the SCS-1. The receiver assigns the value to that field allowing the operator to accept its entry and respond to the next field.
Del (Delete)	A key located on the keyboard that clears the information currently in the cursor location. The cursor then moves to the next field. The use of this key varies between programs.
Entry	Information typed into the SCS-1 through the keyboard attached to the CRT. This information is entered into the system when the Return key is pressed.
Field	A single item of information on a CRT screen. For example, a field within the System Configuration program would be the company name. Another field in this selection would be the type specification for line 2.
Menu	A CRT display that lists the program selections available to the operator.
Numeric	Description of numerical information. For example, the set of characters 1 2 3 4 5 is numeric.
Esc	A key located on the SCS-1 keyboard that terminates the current selection and returns you to the System Menu.
User Number	The sequential number assigned to each user code number by the panel during its programming. This is the number transmitted to the SCS-1 Receiver. The actual code number is never transmitted.

4.2 CRT Features

The CRT screen is divided into three display areas: the status line, the data area, and the label line.

The status line at the top of the screen displays terminal status messages or messages received from the SCS-1 Receiver.

The data area in the middle of the screen provides an area for you to enter data selections and also displays data from the SCS-1.

The label line at the bottom of the screen provides information to help you move around the program.

4.3 How to Operate the Security Control

The CRT first displays a message, or a prompt, to enter information in a field. After you type in the information, press the return key to allow the system to start processing your entry and move the cursor to the next field.

If you make a mistake while typing information, use the BACKSPACE key to move the cursor under the character you want to change and then type in the correct information. To change an entire word or series of characters, move the cursor under the first letter of the word or first character and type in the correct information.

Pressing the Esc key allows you to terminate the current selection and display the System Menu.

The Del key allows you to delete all data contained in the FIELD designated by the cursor. The Del key may not work in some fields; its correct use is noted at the beginning of each program description.

Always have the Caps Lock set to operate the SCS-1.

Detailed instructions on how to operate the system programs are contained on the following pages.

4.4 Alarm Acknowledge

When the SCS-1 receives an emergency message, the keyboard locks, an alert sounds, and displays a message similar to the example shown below. The alert continues to sound until the **ACK** key is pressed on the keyboard acknowledging the alarm. The keyboard then returns to normal operation.

Note: Not all keyboards have a key labeled **ACK**. If your keyboard does not have an **ACK** key, press the key to the right of the space bar to acknowledge alarms.

After an emergency message is acknowledged, it is replaced by the next emergency message. Refer to the **Printout Explanations** section for a description of the various messages that are displayed for acknowledgment.

1-12345 ZONE: 10 FRONT DOOR-BURGLARY ALARM 10:56 a.m.

ENTER SELECTION:

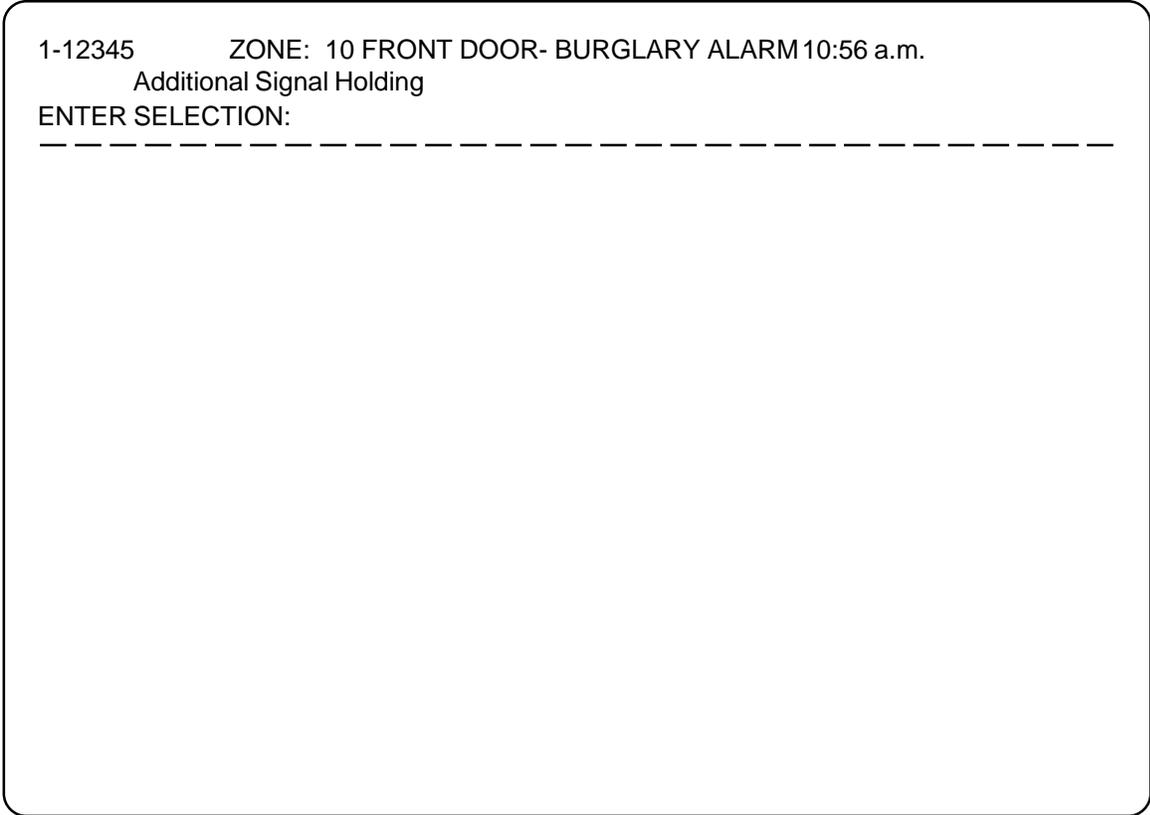
4.5 Additional Signal Holding

When any emergency message is displayed for acknowledgment and a second emergency message is received, Additional Signal Holding is displayed on line two of the CRT display.

This message remains displayed until only one message remains to be acknowledged.

When more than one message is holding in the receiver memory, the messages are prioritized for display in the following order:

- 1) Fire alarms
- 2) Panic and Burglary alarms
- 3) Emergency and Auxiliary alarms
- 4) Fire and Burglary troubles and restorals
- 5) Other messages

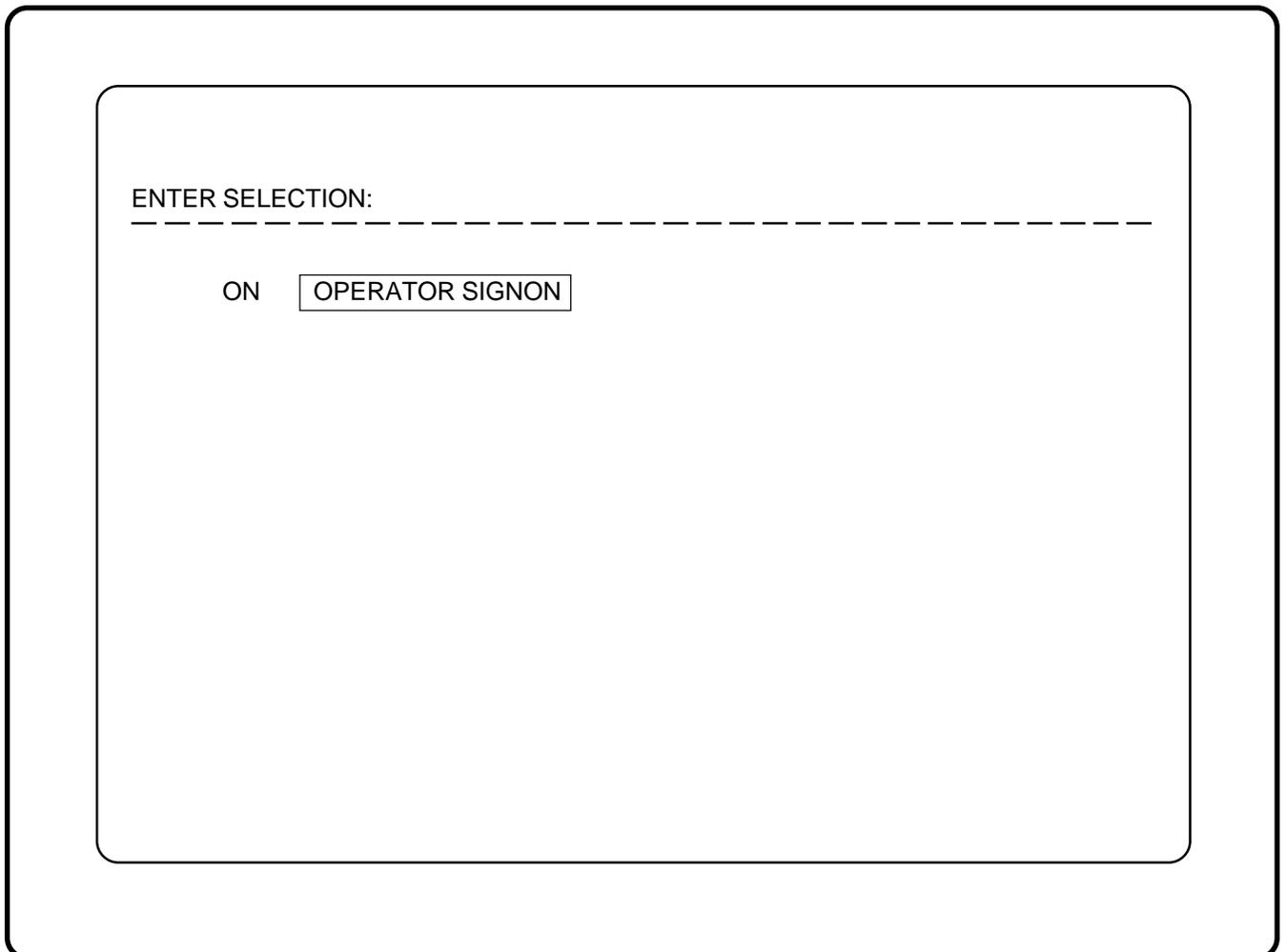


1-12345 ZONE: 10 FRONT DOOR- BURGLARY ALARM 10:56 a.m.
Additional Signal Holding
ENTER SELECTION:

4.6 On - Operator Signon

Operator Signon allows you to access the system programs. The programs available on the SCS-1 are Set System Time/Day/Date, Network Definitions, Operator Codes, Configure System, Redisplay Non-restored Status, and Line Setup. To sign on, type ON and press RETURN.

The operator's name is printed to the ACTIVITY LOG printer. The following page shows the sequence for signing on.



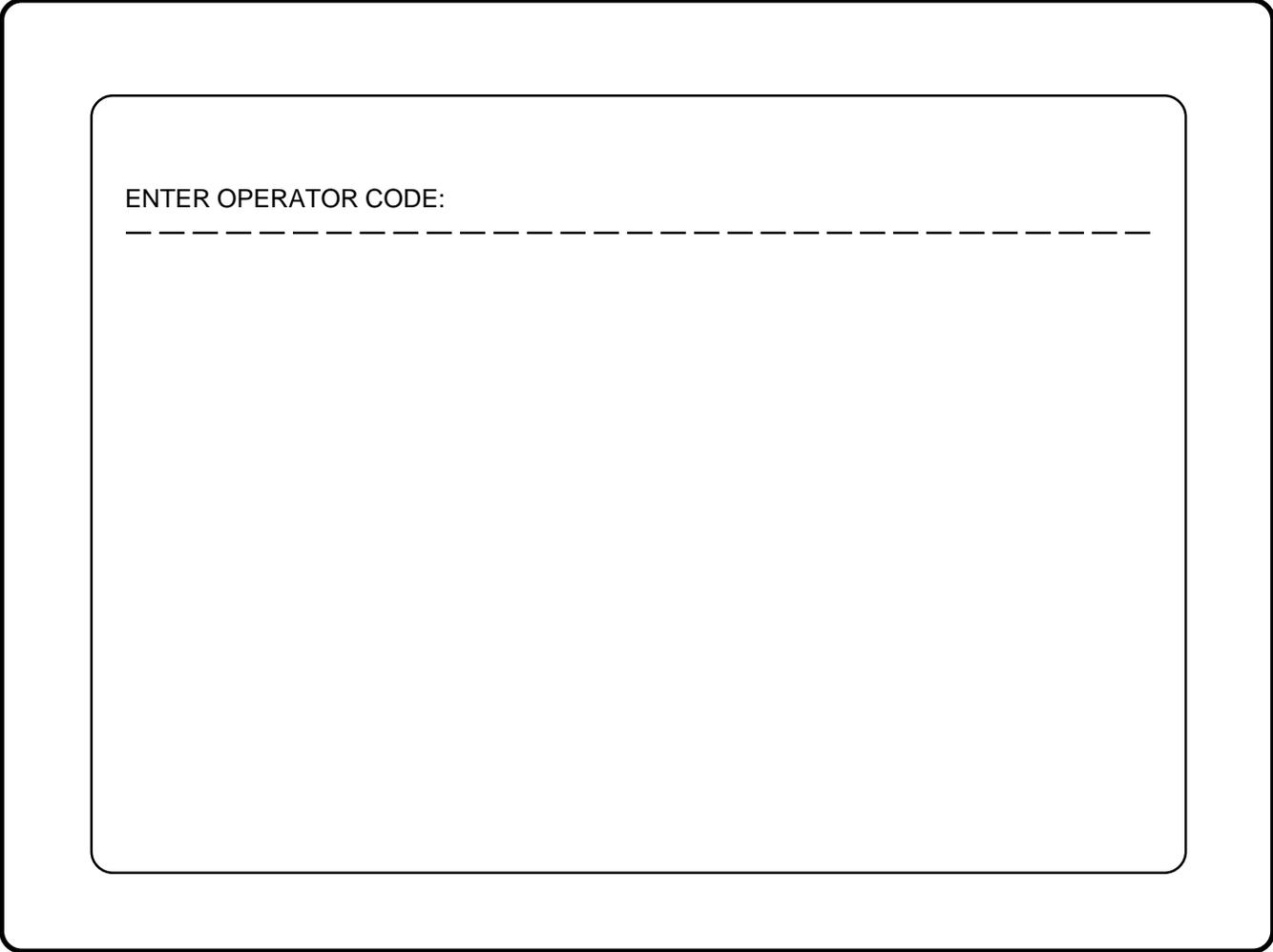
ENTER SELECTION:

ON

OPERATOR SIGNON - ON

- REMEMBER:
- Be sure that the keyboard has the Caps Lock set.
 - Use RETURN to enter a field and to move to the next field.
 - The next field does not appear until the previous field is entered.

FIELD NAME	OPERATOR RESPONSE
ENTER OPERATOR CODE	Enter your operator code and press RETURN. The system menu is displayed. If this is the first time the system is being used, type NEW to gain access to the system menu. The operator code is not displayed when it is entered.



ENTER OPERATOR CODE:

4.7 Off - Operator Signoff

Operator Signoff allows you to exit the system programs. This selection must be made before a new operator can sign on.

The operator's name is printed to the ACTIVITY LOG printer after signing off.

ENTER SELECTION:

OFF	OPERATOR SIGNOFF
TDD	SET SYSTEM TIME/DAY/DATE
NET	NETWORK DEFINITIONS
OPC	OPERATOR CODES
CON	CONFIGURE SYSTEM
RED	REDISPLAY NON-RESTORED STATUS
LSU	LINE SETUP

4.8 TDD - Set System Time/Day/Date

This selection allows you to set the correct time, day, and date on the SCS-1. All changes made in this selection are printed to the ACTIVITY LOG printer. The time entered here will be sent to panels if the programming option "Update Time to Panel is marked YES in the LSU screen. See section 4.13 LSU - Line Setup for more information.

ENTER SELECTION:

OFF	OPERATOR SIGNOFF
TDD	SET SYSTEM TIME/DAY/DATE
NET	NETWORK DEFINITIONS
OPC	OPERATOR CODES
CON	CONFIGURE SYSTEM
RED	REDISPLAY NON-RESTORED STATUS
LSU	LINE SETUP

SET SYSTEM TIME/DAY/DATE - TDD

- REMEMBER:
- Use Esc to exit the current program.
 - Del has no function in this selection.
 - Use Return to enter a field and step to the next field.
 - The next field does not appear until the previous field is entered.

FIELD NAME	OPERATOR RESPONSE
ENTER TIME	Enter the time, such as 2:30 PM.
DAY	Enter the day of the week.
DATE	Enter the month, date, and year in the following format: MM/DD/YY. After this entry, the system menu returns automatically.

ENTER TIME: DAY: DATE:

4.9 NET - Network Definitions

Network Definitions allows you to assign Multiplex Command Processor numbers to the SCS-1. Telephone lines to the Multiplex account numbers assigned must have the correct type specification in the Configure System program.

A Multiplex communication system polls up to 128 accounts on each telephone line. Assigning each account number in service to a line on the SCS-1 ensures only valid accounts are polled. This speeds up communication cycles.

Since digital dialers initiate the communication to the receiver and are not polled, it is not necessary to assign digital dialer account numbers to a line. Telephone lines specified as DD will not accept account number assignments.

The entire line specification is printed to the ACTIVITY LOG printer when any item in the configuration is changed.

ENTER SELECTION:

OFF	OPERATOR SIGNOFF
TDD	SET SYSTEM TIME/DAY/DATE
NET	NETWORK DEFINITIONS
OPC	OPERATOR CODES
CON	CONFIGURE SYSTEM
RED	REDISPLAY NON-RESTORED STATUS
LSU	LINE SETUP

NETWORK DEFINITIONS - NET

- REMEMBER:
- Use Esc to exit the current program.
 - Use Return to enter a field and step to the next field.
 - The next field does not appear until the previous field is entered.
 - Del has no function in this selection.

FIELD NAME**OPERATOR RESPONSE**

LINE NUMBER:

After making the NET selection, you will be asked for the line number to which account numbers will be assigned. Enter the correct line number.

If the line number entered has a type specification of MPX, continue to the next page.

LINE NUMBER:

NETWORK DEFINITIONS - NET (Multiplex Line)

FIELD NAME

DO YOU WISH TO
ADD-DELETE OR
DISPLAY? (A,D)

OPERATOR RESPONSE

If you enter A, you will be asked for a panel number.
Refer to the next page for the correct response.
If you enter D, all Multiplex panel numbers assigned to this line will
be displayed on the CRT screen.

DO YOU WISH TO ADD-DELETE OR DISPLAY? (A,D):

LINE NUMBER:

ACCOUNT NUMBER RANGE:

NEXT PANEL NUMBER AVAILABLE:

TOTAL PANEL NUMBERS IN USE:

4.10 OPC - Operator Codes

This selection allows you to add and delete operator codes. This entry consists of three parts: the operator name or initials, code, and access level. A maximum of ten operators is allowed. The default code has level 9 access and the code is "new". The table below shows the different functions that are available to the different code levels:

Operator Function	No Code	Level 1 to 4	Level 5 to 7	Level 8	Level 9
Acknowledge Alarms	X	X	X	X	X
Signon		X	X	X	X
Redisplay Non-Restored Status		X	X	X	X
Set System Time Day and Date			X	X	X
Network Definitions			X	X	X
Configure System				X	X
Operator Codes					X
Line Setup					X

Any addition or deletion of operator names or changes in access level are printed to the ACTIVITY LOG.

ENTER SELECTION:

OFF	OPERATOR SIGNOFF
TDD	SET SYSTEM TIME/DAY/DATE
NET	NETWORK DEFINITIONS
OPC	OPERATOR CODES
CON	CONFIGURE SYSTEM
RED	REDISPLAY NON-RESTORED STATUS
LSU	LINE SETUP

OPERATOR CODES - OPC

- REMEMBER:
- Use Esc to exit the current program.
 - Use Del to delete entire lines.
 - Use Return to enter a field and step to the next field.
 - The next field does not appear until the previous field is entered.

FIELD NAME	OPERATOR RESPONSE
SYSTEM NUMBER	The correct system number is displayed for reference only and cannot be changed from this program.
OPERATOR	Enter the operator name or initials, maximum of 4 alphanumeric characters. If the name does not exist, it is added to the list. If it does exist it is highlighted and the corresponding code or level can be changed. Press Del to delete the operator name and corresponding code and level.
CODE	Enter the operator code, maximum of 8 alphanumeric characters.
LEVEL	Enter the operator level 1 to 4, 5 to 7, 8, or 9. After this entry, the cursor returns for the next operator name. Press Esc for return to the system menu.

Note: If an operator name is entered without a code or level, the system automatically enters a code of ********* and a level of 1.

SYSTEM NUMBER: OPERATOR: CODE: LEVEL:

OPERATOR CODE LEVEL

4.11 CON - Configure System

This selection is made to assign the company name and system number as well as the communication type for each incoming telephone line on the SCS-1 Receiver.

ENTER SELECTION:

OFF	OPERATOR SIGNOFF
TDD	SET SYSTEM TIME/DAY/DATE
NET	NETWORK DEFINITIONS
OPC	OPERATOR CODES
CON	CONFIGURE SYSTEM
RED	REDISPLAY NON-RESTORED STATUS
LSU	LINE SETUP

CONFIGURE SYSTEM - CON

- REMEMBER:
- Use Esc to exit the current program.
 - Use Del to clear phone number, bill number and comment fields.
 - Use Return to enter a field and step to the next field.
 - The next field does not appear until the previous field is entered.

FIELD NAME	OPERATOR RESPONSE
COMPANY NAME	Enter your company name up to 40 characters.
SYSTEM NUMBER	Enter the number of this system. Note: This is not the operational level of the system but an identifier to distinguish between multiple SCS-1 systems.
KEY	Enter your company receiver key. Note: This is an 8-character alphanumeric field. This key is requested by Command Processor™ control panels in the field when remote programming is being done. Once entered this key will not display and it should never be changed. Record this number in the Important information Table in Appendix C.

CO NAME: _____ SYSTEM NO: _____ KEY: _____

COMPANY NAME

SYSTEM NUMBER

CONFIGURE SYSTEM - CON

FIELD NAME	OPERATOR RESPONSE
LINE NO	Enter the line number for which the communication method is to be specified.
TYPE	Enter the communication method. MPX = Multiplex DD = DMP Digital Dialer ASYN = Asynchronous communication for use with computer data networks. NONE = Clear all information for the line.
PHONE NUMBER	Enter phone number of digital dialer line. Maximum 13 characters.
BILL NUMBER	Enter the bill number for this phone line. Maximum 10 characters.

LINE NO: _____

COMPANY NAME

SYSTEM NUMBER

LINE	TYPE	PHONE NUMBER	BILL NUMBER	COMMENT	STS	CALLS
1					.00	0
2					.00	0
3					.00	0
4					.00	0
5					.00	0

NUMBER OF HOST ACCOUNTS CHECKED IN: X HOST MESSAGES: 0

CONFIGURE SYSTEM - CON

<u>FIELD NAME</u>	<u>OPERATOR RESPONSE</u>
COMMENT	After the bill number is entered, you can enter a comment for this line, maximum 15 characters. After this entry, the cursor returns for the next line number. Press Esc to return to the system menu.
STS	This displays the panel number that is being polled in real time for each MPX line.
CALLS	This is a display only field and displays the total number of calls per line since midnight. If MPX, the number of information frames is displayed.
NUMBER OF HOST ACCOUNTS CHECKED IN: X	This is a display only message that displays the number of network accounts that have checked in since the receiver was last reset. X equals the number of accounts that have checked in. This number continues to increase until the receiver is reset.
HOST MESSAGES	This is a display only field and displays the total number of reports sent to the host computer since midnight.

TYPE:	PHONE NUMBER	BILL NUMBER	COMMENT:				

COMPANY NAME							
SYSTEM NUMBER							
LINE	TYPE	PHONE NUMBER	BILL NUMBER	COMMENT	STS	CALLS	
1					.00	0	
2					.00	0	
3					.00	0	
4					.00	0	
5					.00	0	
NUMBER OF HOST ACCOUNTS CHECKED IN: X					HOST MESSAGES:	0	

4.12 RED - Redisplay Non-restored Status

This selection displays fire and supervisory type zones that have not restored from an alarm or trouble condition. The zones are listed in order by account number followed by zone number. When a restoral is received for a zone, it is automatically removed from the list. To remove a non-restored event from an account in the RED screen, enter the account number in the field at the bottom of the page. If an account has more than one non-restored event, the last event for the account will be removed when the account number is entered.

ENTER SELECTION:

OFF	OPERATOR SIGNOFF
TDD	SET SYSTEM TIME/DAY/DATE
NET	NETWORK DEFINITIONS
OPC	OPERATOR CODES
CON	CONFIGURE SYSTEM
RED	REDISPLAY NON-RESTORED STATUS
LSU	LINE SETUP

REDISPLAY NON-RESTORED STATUS - RED

- REMEMBER:
- Use Return to display the next page.
 - Use Esc to exit the current program.
 - The information displayed on the screen is current as of the moment Return is pressed. It is not a "real time" display. To update the screen, press Return again.
 - To remove non-restored events from an account in the RED screen, enter the account number in the field at the bottom of the screen and press Return.

```
-----  
ACCOUNT  ZN#  ZONE NAME  TYPE  STAT  ACCOUNT  ZN#  ZONE NAME  TYPE  STAT  
1-12345   48   SMOKE DET. Fire  TRBL  
1-40345   6    WATER MON. Supv ALRM  
1-40376  16   HEAT DET.  Fire  ALRM
```

ENTER ACCOUNT NUMBER TO REMOVE (I.E. 1-12345):

Press ENTER for next page, Press ESC to go back to the menu.

4.13 LSU - Line Setup

This selection is made to configure the setup of the SCS-1 Receiver line numbers 1 to 5 and the Host output of the receiver.

ENTER SELECTION:

OFF	OPERATOR SIGNOFF
TDD	SET SYSTEM TIME/DAY/DATE
NET	NETWORK DEFINITIONS
OPC	OPERATOR CODES
CON	CONFIGURE SYSTEM
RED	REDISPLAY NON-RESTORED STATUS
LSU	LINE SETUP

LINE SETUP - LSU**FIELD NAME**

ENTER LINE NUMBER
(1-5, H)

OPERATOR RESPONSE

If a number 1 to 5 is entered, the individual line setup screens for each of the SCS-1 Receiver line cards are displayed on the CRT screen. **Note: *These parameters are for digital dialer or multiplex and are only changed from the factory defaults in special applications.***

If H is entered, the Host configuration screen is displayed on the CRT screen.

ENTER LINE NUMBER: (1-5: LINE, H: HOST)

LINE SETUP - LINE

FIELD NAME	OPERATOR RESPONSE
SET TO DEFAULTS	Enter YES to set all prompts shown on the screen to factory defaults.
USE MODEM CONTROLS	Enables modem handshaking signals. Select YES for standard multiplex and dialer operations. Select NO for asynchronous operations.
BAUD RATE	The signaling speed between the SCS-1 receiver and the reporting control panels. Baud rate is programmable for 300, 600, 1200, 2400, 4800, 9600, and 19200.
AUTO FLAGS	Enables SDLC flags between polls. Select NO for standard multiplex, dialer, and asynchronous operations.
SNRM	Enables Set Normal Response Mode on every poll. Select YES for standard multiplex and dialer operations. Select NO for asynchronous operations.
RESPOND TIMEOUT	The time the receiver waits for a panel to respond to polling before it polls the next panel. (Multiplex only.)
CARRIER LOCKED ON PROCESSING	Enables transmission of global disconnect when the receiver detects carrier after poll response. (Multiplex only.)
INTER POLL DELAY	The time a receiver waits after a panel responds to polling before checking for carrier locked on. (Multiplex only.)
FAILURES TO NO RESPOND	Number of no response to polls before the SCS-1 initiates a panel not responding alarm. (Multiplex only.)

LINE 1 CONFIGURATION

```

-----
          SET TO DEFAULTS:   N (Y/N)
USE MODEM CONTROLS (RTS,CTS,DTR,CD): Y (Y/N)
          BAUD RATE:        300
          AUTO FLAGS:       N (Y/N)
          SNRM:             Y (Y/N)
          RESPOND TIMEOUT:   00.8 (.1-10.0 SEC)
CARRIER LOCKED ON PROCESSING: Y (Y/N)
          INTER POLL DELAY:  .08 (.01-.99 SEC)
          FAILURES TO NO RESPOND: 05 (1-10)
    
```

LINE SETUP - HOST

FIELD NAME	OPERATOR RESPONSE
HOST TEST INTERVAL	Interval in minutes for the communication test message between (S99) the receiver and host computer. Default is one.
ACKNOWLEDGE TIMEOUT	The time in seconds the SCS-1 waits for a host acknowledgment of a message before transmitting it again.
LINE NUMBER LENGTH:	The number of decimal ASCII characters used to report the receiver line number of a signal. Default is zero. No line number reported.
ZONE NUMBER LENGTH	The number of characters used for a zone number.
USER NUMBER LENGTH	The number of characters used for user code numbers.
HOST BAUD	Sets the signaling speed between the SCS-1 and the host computer. Baud rate is programmable for 300, 600, 1200, 2400, 4800, 9600, and 19200.
START CHARACTER	The character used at the start of a host message.
ABORT BY USER	If YES, the receiver sends an Abort by User message to the host. If NO, the receiver converts the Abort by User message to an Abort Signal Received (S45) message.
AREA FORMAT	Selects between 2-character decimal and 2-character hexadecimal reporting formats for area numbers. Type the first letter of your choice (D or B) and press ENTER. Default is D.

HOST CONFIGURATION

SET TO DEFAULTS: N (Y/N)

HOST TEST INTERVAL:01 (1-60 MIN)	AREA FORMAT: BINARY
ACKNOWLEDGE TIMEOUT: 03 (1-15 SEC)	(BINARY, DECIMAL)
LINE NUMBER LENGTH: - (-,1,2)	RETRIES TO HOST FAILURE: 05 (1-15)
ZONE NUMBER LENGTH: 2 (2,3,4)	RECEIVER NUMBER LENGTH: 1 (1,2)
USER NUMBER LENGTH: 2 (2,3,4)	SERIAL 3 MESSAGES: Y (Y/N)
HOST BAUD: 9600	PRINT ALWAYS: Y (Y/N)
START CHARACTER: NONE	CRC: N (Y/N)
(NONE,STX,XXX)	SEQUENCE NUMBER: N (Y/N)
ABORT BY USER: N (Y/N)	USE "z" ZONE MESSAGES: N (Y/N)
	UPDATE TIME TO PANELS: N (Y/N)
	HOURS FROM GMT: 00 (00-23)

- RETRIES TO HOST FAILURE** The number of attempts the SCS-1 makes to transmit a message to the host computer. When this number is reached, the SCS-1 initiates a host failure mode.
- SERIAL 3 MESSAGES** Select NO to convert Serial 3 messages to Serial 1 messages. When YES is selected, the SCS-1 sends a Serial 3 message format to the Host Automation System.
- PRINT ALWAYS** Enables the printer output for all system events. When disabled, printing only occurs in host failure mode.
- CRC** If enabled, each message sent to the host is prefixed with a SIA CIS CRC-16. The format is 4 hexadecimal characters.
- SEQUENCE NUMBER** If enabled, each message sent to the host contains a sequence number ranging from 1 to 99.
- USE "z" ZONE MESSAGES** Select YES to configure the SCS-1 Receiver Host output to use the "z" zone message format in communication with the host automation system. The "z" message processes 16-character zone and area names from DMP XR200 panels. Select NO to configure the receiver to convert all zone messages to the A, T, or R message format.
- UPDATE TIME TO PANELS** Select YES to update the internal clock of the DMP Command Processor panels as they communicate with the SCS-1 Receiver. Select NO to prevent the receiver from updating the internal clock of communicating panels. The time must be sent from the host computer through the SCS-1 host port every 24 hours to allow this function to work.
- If the Host Automation system does not send time updates, if the time has been changed manually at the CRT/keyboard, and Update Time to Panel is set to YES, the time change will be sent to the panels that request time updates for the next 25 hours.
- Note:** If the Time Clock Chip is in the SCS-1062 board, the 25-hour rule does not apply.
- HOURS FROM GMT** Number of hours (0 to 23) from the Greenwich Time zone (GMT) where the SCS-1 is located. Refer to the table below for various cities and GMT settings.

GMT	City/Time Zone
0	London, Monrovia, Lisbon, Dublin, Casablanca, Edinburgh
1	Cape Verde Island, Azores
2	Mid-Atlantic
3	Buenos Aires, Georgetown, Brazilia
4	Atlantic Time (Canada), Caracas, La Paz
5	Eastern Time (US, Canada), Bogota, Lima
6	Central Time (US, Canada), Mexico City, Saskatchewan
7	Mountain Time (US, Canada), Arizona
8	Pacific Time (US, Canada), Tijuana
9	Alaska
10	Hawaii
11	Midway Island, Samoa
12	Fiji, Marshall Island, Wellington, Auckland, Eniwetak, Kwajalein, Kamchatka
13	New Caledonia
14	Guam, Sydney
15	Tokyo, Seoul
16	Hong Kong, Singapore
17	Bangkok, Hanoi
18	Dhaka, Almaty
19	Islamabad, Karachi
20	Abu Dhabi, Kazan
21	Moscow, Bagdad
22	Eastern Europe
23	Rome, Paris, Berlin

PRINTOUT EXPLANATIONS

5.1 General Description

The SCS-1 prints out two general types of messages: changes in the system information and reports received from DMP Command Processor panels. The message line for system changes is bracketed by double asterisks with the time of occurrence printed at the far right. Reports from panels always list the account number first followed by the message and the time of occurrence. The printout below is a typical page from an ACTIVITY LOG.

```

ATLAS SECURITY SERVICE, INCORPORATED
Wednesday      3/1/00      ** ACTIVITY LOG **      Page number:      2
**
** RICK SIGNED ON **      ** 7:58 a.m.
** OPERATOR:   PAT   LEVEL:   8   ADDED TO OPERATOR CODES.      ** 7:59 a.m.
** OPERATOR:   DAVE  LEVEL:   9   CHANGED TO LEVEL: 5.          ** 7:59 a.m.
** SECURITY CONTROL SYSTEM NUMBER CHANGED TO: 1.                ** 8:01 a.m.
** LINE: 3 CONFIGURED AS: MPX   PHONE NUMBER: (214) 555-1212    ** 8:02 a.m.
      BILL NUMBER: 2141175000   DIGITAL DIALER
** MULTIPLEX PANEL NUMBER: 108 ADDED TO LINE: 1                ** 8:04 a.m.
**
** RICK SIGNED OFF **      ** 8:07 a.m.
1-  1  Zone:    8 FRONT DOOR   - BURG      ALARM      8:18 a.m.
1-  1  Zone:    2 BACK DOOR   - BURG      TROUBLE    8:23 a.m.
1-  1  Zone:    2 BACK DOOR   - BURG      RESTORE    8:24 a.m.
1-  1  * * AMBUSH * *
1-  1  Area:    1 OFFICE       - DISARMED  Usr: 007   8:31 a.m.
      2 PLANT
      3 SHIPPING
1-  1  Zone: 010 FRONT DOOR   - BYP      Usr: 015   8:33 a.m.
1-  1  Usr: 009 added to panel      Usr: 002   8:33 a.m.
1-  1  Permanent schedule for Tuesday Area: 1
      Open: 8:00 a.m.   Close: 5:30 p.m.      Usr: 005   8:35 a.m.
1-  1  Door access                Dr: 001   Usr: 021   8:36 a.m.
1-  1  WARNING: Low standby battery      8:38 a.m.
1-  1  Zone: 37 SMOKE DET.       - FIRE     ALARM      8:40 a.m.

```

5.2 System Messages

System messages are provided on the ACTIVITY LOG printer to provide a permanent record of changes made to the system information. The operator making the change is determined by referring to the last sign on.

5.2.1 Operator Sign on/Sign off

This message is printed after an operator enters their code number to access the system menu. The name of the operator and the sign on time are printed. The code number of the operator is not printed. The same process is followed when the operator signs off.

5.2.2 Time/Day/Date

When the time, day, or date is changed, the old and the new value are printed.

5.2.3 Operator Codes

When a new operator is added to the system, the operator name and level are printed. Any time a current operator is deleted from the system a similar message is printed. When only the operator level is changed, the old level and the new level are printed.

5.2.4 System Number

When the system number is changed, the new system number is printed.

5.2.5 Telephone Line Configuration

Each time a change is made to any part of a line configuration, all parts of that configuration are printed. This message is a 2-line format.

5.2.6 Network Definitions

Adding or deleting a Multiplex account from a Network Definition prints the panel number and line on the ACTIVITY LOG printer.

5.3 Command Processor Reports

Reports from Command Processor panels are sent to the SCS-1 advising of various changes in the panel status. The reports are printed and/or displayed on the CRT.

5.3.1 Alarm, Trouble, and Restore

These reports are all formatted the same. Alarm and Trouble messages are printed to the ACTIVITY LOG and displayed on the CRT for acknowledgment.

Fire and Supervisory restorals are displayed on the CRT for acknowledgment and printed to the ACTIVITY LOG while other restore messages are printed to the ACTIVITY LOG only.

5.3.2 Ambush

The Ambush report is printed and displayed on the CRT for acknowledgment.

5.3.3 Opening and Closing

Openings and Closings reports list the areas that are armed or disarmed and the user name making the change. These reports can be from 1 to 8 consecutive lines and are printed to the ACTIVITY LOG only.

5.3.4 Bypass and Reset

This report is printed in a one line format listing the zone number, zone name, and user name making the change. The report is logged on the ACTIVITY LOG only.

5.3.5 Add and Delete Codes

This report lists the user name that is added or deleted along with the user name of the individual making the change. The report is logged on the ACTIVITY LOG only.

5.3.6 Schedule Changes

This is printed in a 2-line format listing the type of schedule, day of the week, opening and closing time, and the user name making the change. This report is printed on the ACTIVITY LOG only.

5.3.7 Door Access

This report lists the user name accessing the door strike relay and the door number that is being accessed. The door number matches the keypad address operated by the user. This report is printed on the ACTIVITY LOG only.

5.3.8 Acknowledgment of Fire alarms and troubles

This report is listed each time a fire type zone alarm or trouble report is acknowledged by the operator. The report includes the account number, zone number, and the acknowledged condition.

5.4 Message Destinations

	Activity	CRT		Activity	CRT
	Log			Log	
Operator Signon/Signoff	X		Zone Restore	X	*
Time/Day/Date	X		Ambush	X	X
Operator Codes	X		Opening and Closing	X	**
System Number	X		Bypass and Reset	X	
Telephone Line Configuration	X		Add and Delete Codes	X	
Network Definitions	X		Schedule Changes	X	
Zone Alarm	X	X	System Messages	X	X
Zone Trouble	X	X	Door Access	X	

* Restorals of fire and supervisory type zones are the only zone restorals displayed on the CRT for acknowledgment.

** The Opening and Closing reports are displayed on the CRT for acknowledgment if this feature has been programmed as YES in the Command Processor panel.

ERROR MESSAGES AND PRINTER TROUBLESHOOTING**6.1 Error Messages**

Error messages requiring explanation are shown below.

6.2 ACCESS DENIED!

The operator has failed three successive times to enter an operator code contained in the system files.

6.3 CHANGING LINE TYPE

CHANGING LINE TYPE WILL CAUSE NETWORK MEMORY TO BE LOST! . . . DO YOU WISH TO COMPLETE THIS CHANGE?

This prompt is given every time the type specification of a polling type line is changed. If N is the response, no action is taken by the SCS-1. If Y is the response, all Network Definitions for the line are erased.

6.4 *END OF JOB*

This display signifies that the last field in the selection has been completed or the ESC key has been pressed. After display of this message the system menu returns.

6.5 INVALID CODE! TRY AGAIN

The operator code entered does not exist in the system files.

6.6 INVALID RESPONSE!

The response entered does not match the required syntax or is out of range.

6.7 INVALID SELECTION!

The selection entered is not available from the current cursor location. Check the screen menu for valid selections.

6.8 OPERATOR MEMORY FULL!

The SCS-1 accommodates up to 15 operators in the system files. To add a new operator a current operator must be erased.

6.9 OPERATOR WHICH IS SIGNED ON MAY NOT BE ERASED!

This is to safeguard against erasing the only Level 9 code in the system files.

6.10 ACTIVITY LOG ERROR

When the SCS-1 cannot complete printing of a message to the ACTIVITY LOG printer, this alarm message is displayed on the CRT for acknowledgment. Installation of a dummy plug, which shorts pins 4 and 5, causes all messages waiting to be printed and all messages received while it is installed to be lost. Possible causes of failure are:

Power Light Not Lit

Check AC outlet. If the outlet is good, check the internal circuit breaker and fuse located on the left rear corner of the printer.

SEL Light Not Lit

Press the SEL switch to light the SEL light. If the light does not come on, turn the unit off for five seconds and try again.

PAPER Light Lit

In this case the SEL light cannot be lit and paper must be added.

Bad Printer Cable

If the printer can complete a test printing and installing a dummy plug at the rear of the SCS-1 can silence an alarm, the printer cable has been damaged.

If none of the above are the cause for the activity log error, contact DMP Technical Support at:

1-800-641-4282

If calling internationally, dial 1-417-831-9362

APPENDIX A - HOST COMMUNICATION FORMATS

Serial 1 Messages

The Serial 1 message format is based on fixed positions for information content and a constant character string length. Serial 1 Messages are only sent to the Host Automation Computer when an alarm panel sends the message in the Serial 1 message format.

Serial 3 Messages

The Serial 3 message format is available when an XR200 or XR200-485 panel is communicating to an SCS-1 Receiver. Serial 3 allows 16-character user names to be sent to the Host Automation Computer. Additionally, the design of the Serial 3 format provides for the addition of new information in later upgrades *without the need to immediately* upgrade the SCS-1 Receiver or the Host Automation Computer software.

Serial 3 Messages are only sent when an alarm panel sends the message in the Serial 3 Message format and the Serial 3 Messages option in the Host Configuration programming of the SCS-1 Receiver is programmed YES. If the receiver is programmed NO for Serial 3 Messages, all messages are automatically converted to the Serial 1 format and then sent to the Host Automation Computer.

The following table includes the Serial 1 and 3 messages.

Serial Message Table

Message	Serial	Description
Zone Event	1 & 3	These messages provide information about various zone events.
Zone Bypass & Reset	1	This message indicates that a zone was bypassed and removed from service or reset and returned to service.
Disarmed, Armed, & Late to Arm	1	These messages indicate that an area was either armed, disarmed, or was not armed by a scheduled time.
User Code Add, Delete, & Change	1 & 3	This message indicates that a user code was added, deleted, or changed. Includes the user that made the change and the user code changed.
Opening/Closing	3	These messages indicate that an Opening or Closing occurred.
Door Access	1 & 3	This message indicates that a user code was entered at a device and the door relay was activated.
Schedule Change	1 & 3	This message indicates a programmed panel schedule has been added, deleted, or changed.
Holiday Date Change	3	This message indicates a holiday date has been changed and includes the user that made the change.
Service Man	1 & 3	This message indicates that a service person has entered a number at the MAN NUMBER prompt at a keypad. When a number is entered, the number and time can be tracked by a Host Automation Computer.
Equipment	1 & 3	This message provides information about service that was performed at an account. A service person enters the information at a keypad and it is recorded at the central station for billing.
System	1 & 3	The System messages represent general system alarm, trouble, or restoral conditions that occurred at an alarm panel or SCS-1 Receiver.

System Message Table

Message #	Message Name	Description
S00	A.C Power Restored	A.C Power was restored to the panel. This message is a restoral for S08 .
S01	Standby Battery Restored	The panel battery voltage has restored to greater than 12.6 VDC at the last battery test. This message is a restoral for S09 .
S03	Panel Tamper Restored	The panel's built-in tamper circuit was restored to a normal condition. This message is a restoral for S11 and S74 .
S04	Backup Communication Line Restored	The panel's backup line of communication was restored. This message is a restoral for S12 .
S05	Panel Ground Restored	The panel's built-in ground detection circuit was restored to normal. This message is a restoral for S13 .
S06	System Not Armed by Scheduled Time	This message is transmitted 10 minutes after the closing time of the panel's internal schedule when the schedule is not extended or the panel is not armed within the 10 minutes. The keypad alerts the users that the system is not armed and allows them to extend the schedule. Panel programming provides an option to activate this message.
S07	Automatic Recall Test OK	Automatic communication test typically sent every 24 hours. Some panels allow for variable time periods and defer operation. All combination fire/burg panels allow test to be deactivated. See also S88 .
S08	WARNING: A.C. Power Failure	Indicates main A.C. Power is not present or is less than 85% of normal. Message is sent after panel programmed delay time (15 seconds to 9 hours) has expired. The restoral message is S00 .
S09	WARNING: Low Standby Battery	Indicates that standby battery has fallen below 11.9 vdc. Battery is tested at 15 minutes past each hour. The restoral message is S01 .
S11	WARNING: Panel Tamper	The panel has detected that while all areas were disarmed, the panel's built-in tamper circuit was placed in an open condition. The restoral message is S03 . Also, see S74 .
S12	WARNING: Panel Backup Communication Fail	Indicates that the backup channel of communication has failed. This message is only transmitted on the main channel of communication when either of the following two events occur: (1) When HST is programmed for main and a dialer is programmed for backup and the dialer line(s) fail to get a message transmitted in 10 attempts or (2) When HST is programmed as backup and the HST message acknowledgment from the receiver is not received by the panel. The restoral message is S04 .
S13	WARNING: Panel Ground Fault	The panel's built-in ground detection circuit was placed in an open condition. The restoral message is S05 .
S14	WARNING: Non-Alarm Message Overflow	The panel detected that many non-alarm messages occurred in an extremely short period of time and its communication buffer could not hold all of them. After the messages that the communication buffer could hold are sent, this message (S14) is sent to indicate that some non-alarm messages were not transmitted and were not retained in panel memory. Examples of messages are openings, closings, schedule changes, and code changes. Also see S18 , S40 , S41 , S42 , and S44 .
S15	* * AMBUSH * *	The end-user has initiated a silent alarm because of an emergency situation. It occurs when the user enters the user code (PIN) assigned to user number position one. Panel programming allows for this message to be optional.
S16	WARNING: Panel Not Responding	The receiver detects that the supervised account (high security) has failed to communicate within its proper time window. This message is only sent when the panel's main communication is set for MPX, DNET, or HST. MPX (multiplex) is a supervised direct wire connection and DNET or HST is packet data network communications such as Ethernet or long range radio. The restoral message is S17 .
S17	Panel Response Restored	The receiver has detected that communication with the supervised account (high security) has been restored. This message is a restoral for S16 .

Message #	Message Name	Description
S18	ALARM: Zone Alarm Overflow	The panel detected that many zone alarms occurred in an extremely short period of time and its communication buffer could not hold all of them. After the alarms that the communication buffer could hold are sent, this message (S18) is sent to indicate that some zone alarm messages were not transmitted and were not retained in panel memory. Also, see S14 , S40 , S41 , S42 , and S44 .
S19	WARNING: New Panel on Line	The receiver is indicating that a new account has become active. This message is sent any time the panel's communication programming is setup for the first time or when a change is made in the communication programming.
S20	ALARM: Carrier Locked on Line	The receiver is indicating that it detects an obstructing amount of noise on a MPX line. Whatever the source, the amount of noise is disrupting the MPX (high security) communication to all accounts on the MPX line. The restoral message is S22 .
S21	TROUBLE: Message Not Acknowledged	NOT SENT TO HOST AUTOMATION COMPUTER
S22	Carrier Off, Multiplex Line Restored	The receiver is indicating that the obstructing noise on the MPX line has abated and communication is restored to the MPX accounts. This is a restoral for S20 .
S23	Panel Test Signal Received	A manually operated communication test has been performed at the panel keypad.
S24	TROUBLE: SCS1 Test Signal Not Received	NOT SENT TO HOST AUTOMATION COMPUTER
S25	SCS1 Power Up Signal Received	NOT SENT TO HOST AUTOMATION COMPUTER
S26	WARNING: Auxiliary Fuse Trouble	The panel has detected that electrical power is unavailable for the auxiliary output circuit. The restoral message is S27 .
S27	Auxiliary Fuse Restored	The panel has detected that electrical power is now available for the auxiliary output circuit. This message is a restoral for S26 .
S28	WARNING: Telephone Line 1 Trouble	The panel detects that its main telephone connection is disconnected or is in a non-operable state. Also in the case where a Model 893 Dual Telephone Line module is attached, the panel detects that the supervised telephone line does not have sufficient voltage/current to support communications. The restoral message is S29 .
S29	Telephone Line 1 Restore	The panel detects that its main telephone connection is now operational. This message is a restoral for S28 .
S30	WARNING: Telephone Line 2 Trouble	The panel detects that the second telephone line attached to the Model 893 Dual Telephone Line module does not have sufficient voltage/current to support communications. The restoral message is S31 .
S31	Telephone Line 2 Restored	The panel detects that the second telephone line attached to the Model 893 Dual Telephone Line module is now operational. This message is a restoral for S30 .
S34	WARNING: Alarm Bell Silenced	The panel's main bell circuit was manually silenced by a code entry at a panel keypad.
S36	Time/Date Set by Operator	NOT SENT TO HOST AUTOMATION COMPUTER
S37	Security Information Management Startup	NOT SENT TO HOST AUTOMATION COMPUTER
S38	WARNING: Bell Circuit Trouble	The panel's internal bell supervision circuit has detected an inappropriate bell circuit supervision voltage during standby operation. The restoral message is S39 .
S39	Bell Circuit Restored	The panel's internal bell supervision circuit now detects the appropriate bell circuit supervision voltage during standby operation. This message is a restoral for S38 .
S40	ALARM: Fire Zone Alarm Overflow	The panel detected that many fire type zone alarms occurred in an extremely short period of time and its communication buffer could not hold all of them. After the alarms that the communication buffer could hold are sent, this message (S40) is sent to indicate that some fire type zone alarm messages were not transmitted and were not retained in panel memory. Also see S14 , S18 , S41 , S42 , and S44 .

Message #	Message Name	Description
S41	ALARM: Panic Zone alarm Overflow	The panel detected that many panic type zone alarms occurred in an extremely short period of time and its communication buffer could not hold all of them. After the alarms that the communication buffer could hold are sent, this message (S41) is sent to indicate that some panic type zone alarm messages were not transmitted and were not retained in panel memory. Also, see S14, S18, S40, S42, and S44 .
S42	ALARM: Burglary Zone Alarm Overflow	The panel detected that many burglary type zone alarms occurred in an extremely short period of time and its communication buffer could not hold all of them. After the alarms that the communication buffer could hold are sent, this message (S42) is sent to indicate that some burglary type zone alarm messages were not transmitted and were not retained in panel memory. Also, see S14, S18, S40, S41, and S44 .
S43	WARNING: Bell Fuse Trouble	During standby operation, the panel's internal bell supervision circuit has detected that power is unavailable to operate the bell circuit. The restoral message is S53 .
S44	WARNING: Fire-Burglary Trouble Overflow	The panel detected that many fire and burglary type zone troubles occurred in an extremely short period of time and its communication buffer could not hold all of them. After the troubles that the communication buffer could hold are sent, this message (S44) is sent to indicate that some fire-burglary type zone troubles messages were not transmitted and were not retained in panel memory. Also, see S14, S18, S40, S41, and S42 .
S45	Abort Signal Received	After a burglary alarm occurred and before the panel's bell cutoff timer expired, a user code was entered at the panel keypad and the panel was disarmed. The intended use for this message is to signal the central station that the burglary alarm was false. This message is only sent if the programmable option in the panel is activated.
S46	Zone Swinger Automatically Bypassed	The panel automatically bypassed a zone because it tripped more times than the number found in Swinger Bypass of panel programming. The zone number is transmitted using an "X" message immediately after S46. This message is activated based on panel programming for each zone. It is also completely deactivated when Swinger Bypass in panel programming is set to zero.
S47	Zone Swinger Automatically Reset	After being automatically bypassed, the panel automatically reset a zone because it did not trip for one complete hour. This operation and message is a panel programmed option called RST SWYB found in System Options. The zone number is transmitted using a "Y" message immediately after S47 .
S50	WARNING: Supervised Wireless Trouble	The panel has detected that an attached wireless receiver has stopped properly communicating with the panel. This message is only sent if the panel first detects that the wireless receiver is attached. The restoral for this message is S89 .
S52	Signal Disabled by Operator	NOT SENT TO HOST AUTOMATION COMPUTER
S53	Bell Fuse Restored	During standby operation, the panel's internal bell supervision circuit has detected that power has been re-established for the operation of the bell circuit. This message is a restoral for S43 .
S54	WARNING: Unsuccessful Remote Connect	The panel rejected an attempt by an SCS-1 or SCS-105 receiver to communicate in a remote session (upload/download). The possible reasons are incorrect account number, incorrect receiver keys (passwords), or incorrect panel key (password).
S55	Internal Message	NOT SENT TO THE HOST AUTOMATION COMPUTER
S56	Control Panel Trapped - Connect Now	NOT SENT TO THE HOST AUTOMATION COMPUTER
S57	Message Pending - Please Disconnect	NOT SENT TO THE HOST AUTOMATION COMPUTER
S58	ALARM: Panel Substitution	The receiver has detected that a supervised HST (network) panel account has been substituted by another panel. The intended use of this message is to detect in high security applications when communication for the account is substituted by the use of a duplicate panel.

Message #	Message Name	Description
S59	WARNING: Substitution/Checkin Overflow	The receiver has detected that its memory cannot accommodate the number of supervised HST (network) panel accounts that have been established. The maximum number of HST panel accounts with Checkin enabled that can be established on an SCS-1 Receiver is 2500.
S60	WARNING: Redundant Receiver Failure	NOT SENT TO THE HOST AUTOMATION COMPUTER
S61	WARNING: Communication Trouble L1	NOT SENT TO THE HOST AUTOMATION COMPUTER
S62	WARNING: Communication Trouble L2	NOT SENT TO THE HOST AUTOMATION COMPUTER
S63	WARNING: Communication Trouble L3	NOT SENT TO THE HOST AUTOMATION COMPUTER
S64	WARNING: Communication Trouble L4	NOT SENT TO THE HOST AUTOMATION COMPUTER
S65	WARNING: Communication Trouble L5	NOT SENT TO THE HOST AUTOMATION COMPUTER
S66	System Test Begin	The panel has been placed in a mode for the testing of fire zones. Zones that are tripped will be reported as Zone Verify or Zone Fail for recording purposes. The Test End message is S67 .
S67	System Test End	The panel has been removed from a fire walk test. This is a Test End message for S66 .
S68	Receiver Printer Failed	The SCS-1 Receiver detects that the appropriate RS-232 voltage is not present on pin 5 of the Activity Log connection. The restoral message is S69 .
S69	Receiver Printer Restore	The SCS-1 Receiver detects that the appropriate RS-232 voltage is now present on pin 5 of the Activity Log connection. This message is a restoral for S68 .
S70	End of History Buffer	NOT SENT TO THE HOST AUTOMATION COMPUTER
S71	Request for Receiver Time and Date	NOT SENT TO THE HOST AUTOMATION COMPUTER
S72	WARNING: Network Trouble	The panel has not received a proper acknowledgment from the SCS-1 Receiver. This message is only transmitted if the panel is programmed for HST network communication as either the main or backup communication. The restoral for this message is S73 .
S73	Network Restored	The panel has received a proper acknowledgment from the SCS-1 Receiver. This message is only transmitted if the panel is programmed for HST network communication as either the main or backup communication. This message is a restoral for S72 .
S74	ALARM: Tamper During Armed State	The panel has detected that while any area is armed, the panel's built-in tamper circuit was placed in an open condition. The restoral message is S03 . Also, see S11 .
S75	SIMS Operator Acknowledgment Failure	NOT SENT TO THE HOST AUTOMATION COMPUTER
S76	SIMS Operator Acknowledgment Restored	NOT SENT TO THE HOST AUTOMATION COMPUTER
S77	ALERT: Unauthorized Entry	The panel has detected that a low level user (Level 2) has disarmed an area outside of the panel's internally stored schedule. This message is not sent when the Level 2 user disarms an area inside of the panel's internally stored schedule.
S78	ALERT: System Recently Armed	The panel has detected that the alarm message that it just sent was generated within five minutes of the panel being armed. The intended use of this message is to inform the central station that the panel was just armed before the alarm occurred.
S79	ALERT: Signal During Opened Period	The panel has just generated and sent a burglary alarm to the central station. It has also detected that this burglary alarm occurred during the normal open period of the panel's internal schedule.
S80	ALERT: Exit Error	The panel has detected that an Exit type zone was open just after the expiration of the exit delay at arming (door left open). The alarm bell rings for 10 seconds and then the exit zone is force armed.
S81	DDMX - Connect	NOT SENT TO THE HOST AUTOMATION COMPUTER
S82	DDMX - Disconnect	NOT SENT TO THE HOST AUTOMATION COMPUTER
S83	Remote Programming Co	The panel has detected that a remote (upload/download) session has just been completed.

Message #	Message Name	Description
S84	Remote Command Received	The panel has detected that during a remote (upload/download) session, it responded to a command such as arm/disarm, schedule change, etc.
S85	DDMX - Redundant	NOT SENT TO THE HOST AUTOMATION COMPUTER
S86	WARNING: Local Programming	The panel has detected that an on-site panel programming session has just begun or has just been completed.
S87	WARNING: Transmit Fail	The panel has detected that since its last valid communication, it made 10 attempts to call the receiver and these attempts failed. Those messages will not be sent to the receiver.
S88	Automatic Recall OK - Unrestored System	The panel has detected that one of its circuits has not restored to normal at the time the automatic communication test is performed. These possible circuits are Zones, AC Power, Standby Battery, and Phone Lines. This UL required message is to ensure that fire systems are properly maintained. Also, see S07 .
S90	WARNING: Unrecognized Message	A signal transmitted to the receiver by a panel using a valid communication sequence could not be recognized as a definable message by the receiver.
S91	Service Requested	By use of a keypad command, a user is indicating the need for service on the alarm panel.
S92	WARNING: No Arm/Disarm Activity	The panel has detected that areas have not been armed or disarmed in the programmed number of days. This may be an indication that the end-user has stopped using the alarm system.
S93	ALARM: User Activity Not Detected	The panel has detected that zone open or short activity has not occurred at disarmed zones within the programmed number of hours. This message may indicate that an end-user is not moving within the premise.
S94	ALERT: Activity Check Enabled	The end-user has manually enabled the Activity Check Feature. This feature indicates that activity on disarmed zones has not occurred within the programmed time period.
S95	ALERT: Activity Check Disabled	The end-user has manually disabled the Activity Check Feature. This feature indicates that activity on disarmed zones has not occurred within the programmed time period.
S98	SCS-1 Memory Full	The SCS-1 Receiver has detected that its memory cannot hold another message from a panel and will not accept any other panel signals. The intended use of this message is to indicate that after an extended period of time, the receivers large memory has become full because it is unable to release a message to the SCS-1 CRT or the SCS-1 Printer. When the SCS-1 Receiver is not receiving a proper acknowledgment from the Host Automation Computer, it operates in the NO RESPONSE FROM HOST AUTOMATION mode. Messages are sent to the SCS-1 Printer and to the SCS-1 CRT for acknowledgment by an operator. If the CRT and/or Printer are not operating properly, or if messages are not acknowledged at the CRT, the memory begins to store the messages until it is full. Also, if the PRINT ALWAYS option in receiver programming is marked YES (See section 10) and the printer is not operating correctly, the memory begins to store messages until it is full. This occurs when the Host Automation Computer is or is not properly acknowledging messages. This message is always sent Serial 1 .
S99	System Check	The SCS-1 Receiver sends this message at a periodic rate to verify communication between the receiver and the Host Automation Computer. The periodic rate is based on receiver programming in the Host Configuration screen (See section 10.1 Host Test Interval). This message is always sent Serial 1 .

APPENDIX B - NETWORK CONNECTIONS

What is asynchronous communication?

DMP asynchronous communication varies from standard DMP multiplex (synchronous) communication in two ways. First, asynchronous is not a polled format like DMP multiplex, where each system is polled regularly by the receiver. With asynchronous, the panel sends supervision reports when programmed and receives acknowledgment for the reports from the receiver in much the same way a dialer account would.

A major difference between asynchronous and dialer accounts is the ability of the panel to use digital asynchronous networks, such as computer data networks, instead of standard analog phone lines.

Secondly, the format of the data is different using asynchronous communication. Past reports sent by DMP panels have always been in Synchronous Data Link Control (SDLC) packet format. Reports from panels using asynchronous communication is in the DMP Host format. Previously, this format was used only by the DMP SCS-1 Receiver to communicate with Host automation systems.

Now, by selecting Host (HST) as the Communication Type in the panel, and Asynchronous (ASYN) as a the Line Configuration in the SCS-1 Receiver, alarm and system reports from subscriber accounts can be accepted by the receiver and sent along to the automation system without the need to convert any data.

Asynchronous Communication from the CONfigure screen

The SCS-1 Receiver supports asynchronous communication of alarm and system reports from XR200 Command Processor Panels over Computer Data Networks.

CONfiguring the receiver line

From the SCS-1 Receiver CRT Main Menu, type CON and press Enter. Press Enter until the CRT displays the line configuration (CON) screen. Under the heading "Type", enter the letters **ASYN** for the particular line (port on the SCS-1062) that will be using Asynchronous communication. Return to the Main Menu screen. The selected line will now be able to accept incoming reports from XR200 panels using the asynchronous Host (HST) report format.

Although the receiver does not poll an XR200 panel using asynchronous communication on a regular basis, the receiver responds to each report the panel sends with an ACKnowledgment signal.



When **ASYN** is selected, the SCS-100 Line Card for the CONfigured line is not used for communication. Instead, a DMP SCS-205 Cable (shown to the left) connects the SCS-1062 Processor port directly to the digital network. The SCS-1062 port must be configured for asynchronous operation by resetting its jumpers. See Figure 1. Any port can be configured for SDLC communication or Asynchronous digital network communication.

When changing between SDLC and Asynchronous, only jumpers **Q** through **Z** and **aa** through **dd** are moved.

Setting the SCS-1062 port configuration jumpers

For the port chosen to connect to the SCS-101, configure the small gold jumpers for ASYN as shown below.

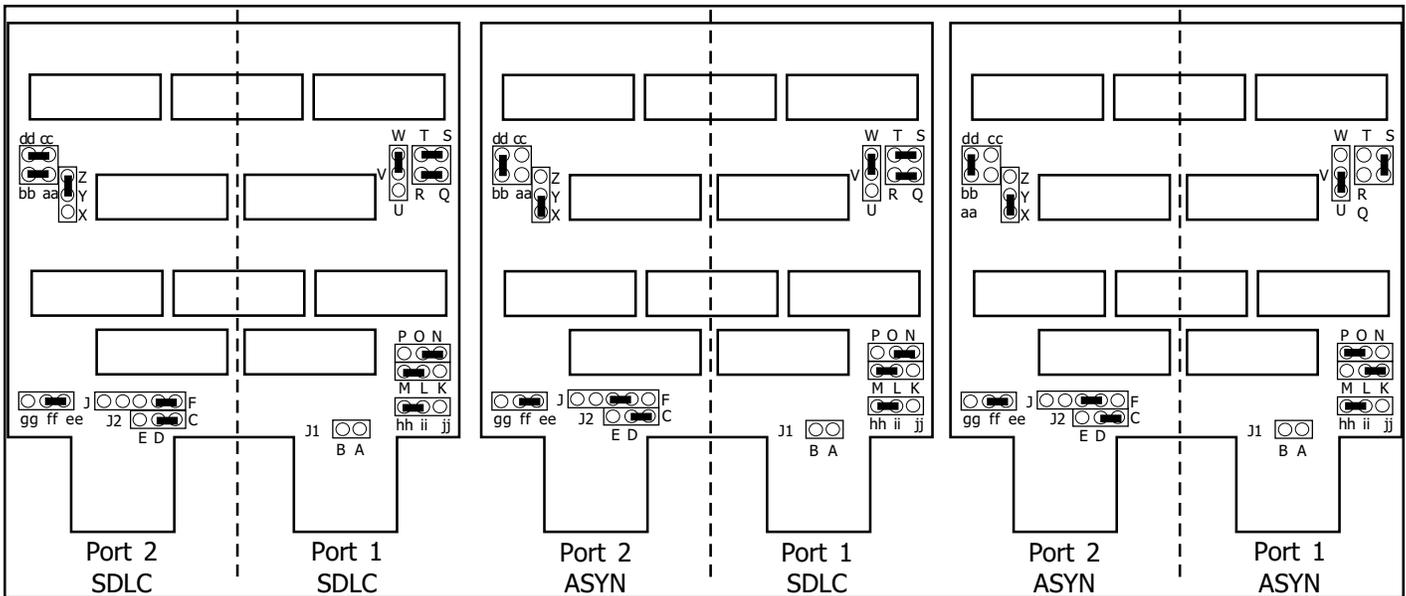


Figure 1: SDLC and Asynchronous jumper settings.

After setting the jumpers on the selected port card for ASYN operation, you must also set the port configuration jumpers located on the main SCS-1062 card in a row along the back of the individual port cards. See Figure 2. Set the jumpers according to the list of pin numbers in the table on the right.

Use this example to set the four jumpers on each port you have selected for asynchronous communication.

	For SDLC	For ASYN
Line 1	1, 4, 6, 8	2, 3, 6, 8
Line 2	9, 11, 13, 16	9, 11, 14, 15
Line 3	17, 20, 22, 24	18, 19, 22, 24
Line 4	25, 27, 29, 32	25, 27, 30, 31
Line 5	33, 36, 38, 40	34, 35, 38, 40

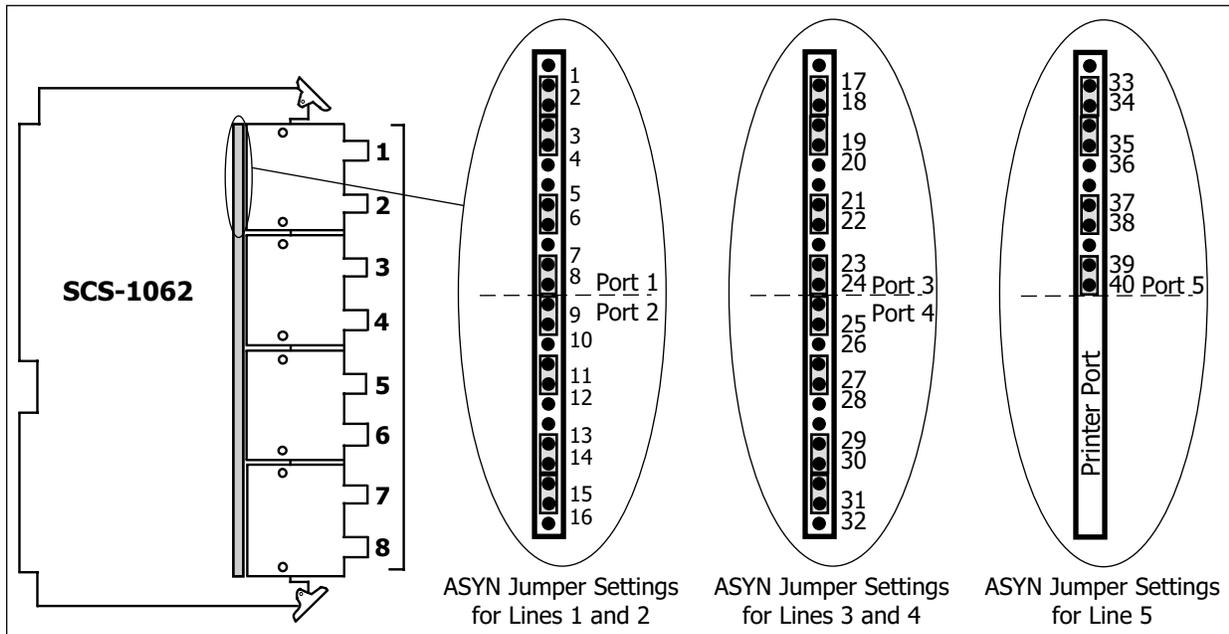
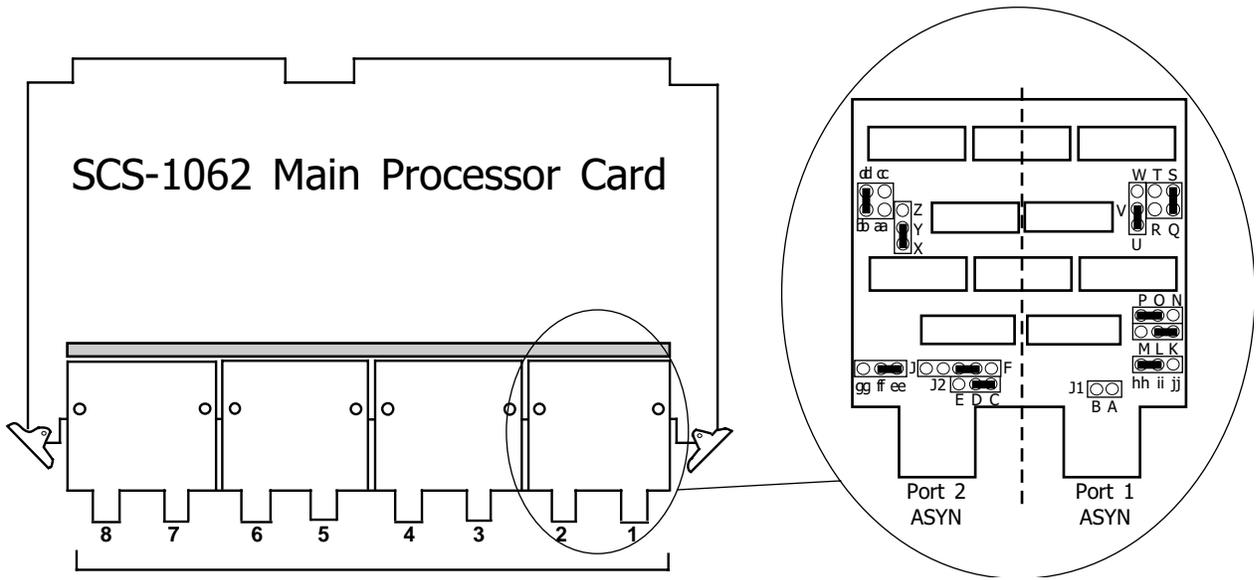


Figure 2: SCS-1062 Port Configuration Jumper Settings

When you are done configuring the port for asynchronous operation, the port should look like the port in the figure below.



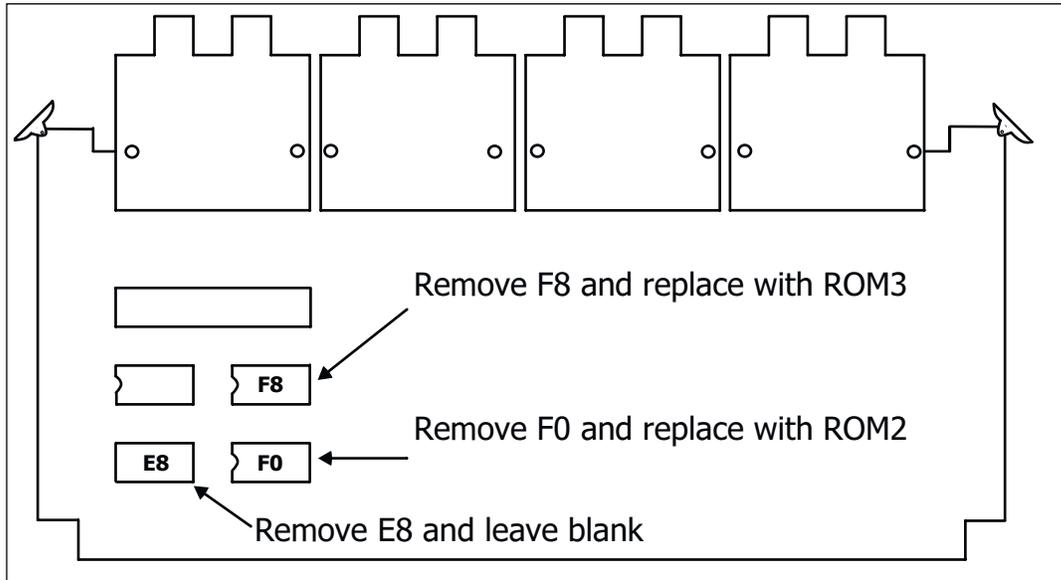
APPENDIX C - SCS-1062 PROM PLACEMENT

Upgrading PROMS

If you are upgrading your SCS-1 firmware from version 808 or older, use this section to properly replace the PROMS and configure the jumpers.

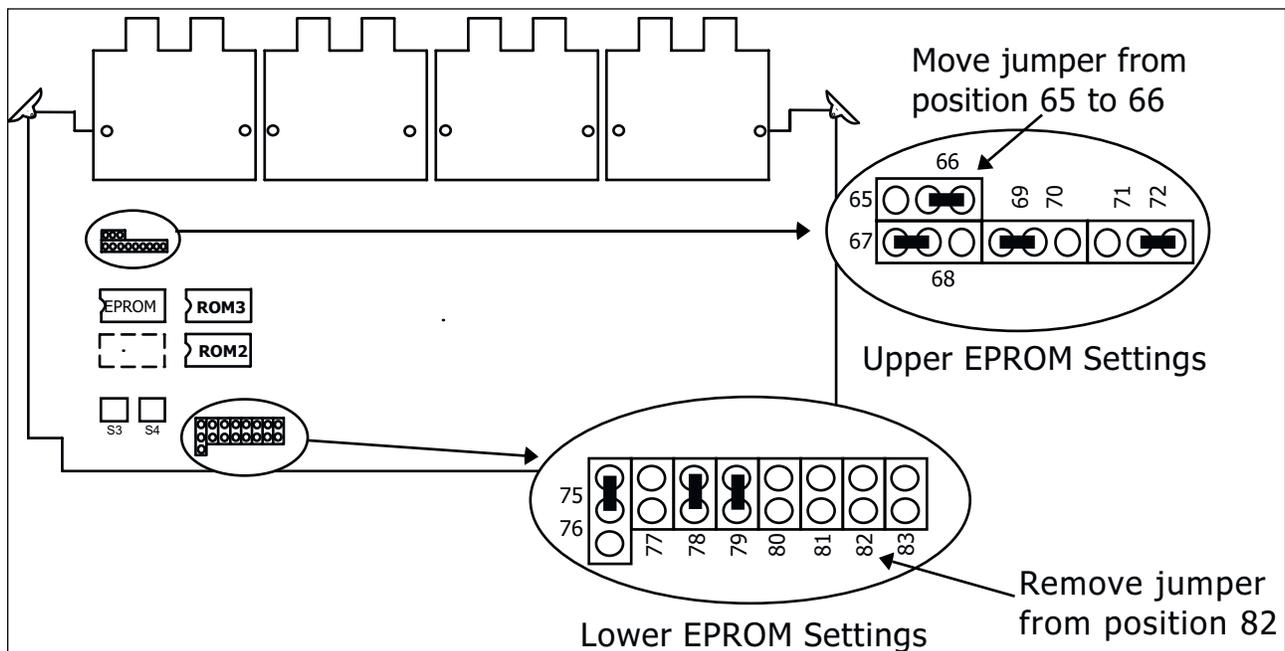
PROM Placement

Firmware versions 808 and older used three PROM chips. Versions 809 and newer only use two. Remove all three of the version 808 or older firmware chips. Insert the two chips as illustrated below. Be sure to configure your jumpers as discussed in the section below.



Jumper Settings

When updating from version 808 or older, you must configure jumpers on the SCS-1062 board. Refer to the drawing below for jumper changes.



Important Things to Remember about your SCS-1 Receiver

Your SCS-1 Receiver has several locking features so unwanted persons cannot alter your settings. The following table lists the defaults for these locking features. Use the right column to enter your passwords and codes.

Important Information

Feature	Default	Present
Operator Password	new (level of 9)	
Receiver key	(none)	

Notes:

Components

SCS-Spares	Spare Board kit
SCS-100	Line Card
SCS-101	Network Interface Card
SCS-110	Modem Power Card
SCS-120	Multibus Power Card
SCS-130	Transformer Card
SCS-201	System Enclosure
SCS-203	Convenience Panel
SCS-204	Host Cable
SCS-208	Power Cord
SCS-PTR	Printer with Cable
SCS-CRT	Display and Keyboard
SCS-1062	Main Processor Card

Accessory Devices

iCOM™	Internet Alarm Router
XR200	Command Processor™ Panel
XR2400F	Addressable Fire Alarm Control Panel
XR200-485	Command Processor™ Panel
462N	Network Interface Card for XR200, XR200-485, and XR2400F
Remote Link	Programming Software
System Link	End-User Management Software



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