

## MIS CARD (090-44018-05 & 090-45018-05)

### SOFTWARE RELEASE DOCUMENT

#### RELEASE 5.05.01

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#### 1. GENERAL

**1.01** This document provides information about Release 5.05.01 of the software for Symmetricom's MIS card (part numbers 090-44018-05 and 090-45018-05).

**1.02** This document has been reissued to correct the part numbers in the first line of the title of the document. Change bars have not been used.

**1.03** All product names, service marks, trademarks, and registered trademarks used in this document are the property of their respective owners.

#### 2. NEW FEATURES

**2.01** This release of the MIS card software includes support for the following cards:

<u>Card</u>	<u>Part Number</u>
GTI	090-42140-17
GTI	090-42140-18
GTI/C	090-44140-18
MCA-5M	090-45015-55
MRC-EA	090-45010-57
MRC-EA/C	090-44010-57
MRC-T	090-45010-58
ST3E	090-40019-11
ST3E	090-40019-13
TO-EAN	090-45029-56

#### 3. CORRECTED ISSUES

**3.01** This release of the MIS card software includes the following corrections:

- *Issue 6-81:* If the communication ports were set for X.25 operation and configured to an AI terminal server interfacing with an NMA system, the communication ports did not properly generate autonomous alarms.

*Correction:* If the communication ports are set for X.25 operation and configured to an AI terminal server interfacing with an NMA system, autonomous messages are correctly generated (corrected with a proper X.25 PAD solution and the new TL1 command SET-REPT-MODE).

- *Issue 7-69:* If two communication sessions were active on a DCD shelf at the same time, the NMA system occasionally raised message time-outs.

*Correction:* If two communication sessions are active on a DCD shelf at the same time, the NMA system does not raise message time-outs.

- *Issue 7-70:* The MIS card does not support multiple X.25 sessions on a single communication port.

*Correction:* The fact that the MIS card does not support multiple sessions on a single communication port is no longer an issue.

- *Issue 7-71:* The X.25 does not support multiple users on a single connection using synchronous communications.

*Correction:* The MIS card does not support synchronous data communications.

- *Issue 8-53:* If commands are entered for an expansion shelf immediately after using the INIT-SYS::9 command, the MIS card in the master shelf sends a DENY message with an error code of IIAC.

*Correction:* No correction is required since this is normal operation because it may take up to a minute to provision the expansion shelf.

- *Issue 8-54:* If the MIS card fails or is removed from service, no quality level is sent.

*Correction:* If the MIS card fails or is removed from service, either QL-STU (domestic) or QL-UNK (international) can be programmed to be sent.

- *Issue 8-56:* If a communication port is changed from X.25 to TERM1 or TERM2 repeatedly, the MIS card may hang-up or the EPROM on the MIS card may fail.

*Correction:* Communication port parameters are not changed during an active session. The session must be dropped and idle before the communication device type is changed.

- *Issue 8-57:* With ECHO off, TimeScan NMS was not detecting two carriage returns following the PAD set commands.

*Correction:* Two carriage returns are sent with PAD set commands.

- *Issue 8-58:* MRC card port-related alarms were not reported through the NMA system even with the SET-REPT-MODE command set to allow both port and equipment alarms to be reported.

*Correction:* MRC card port-related alarms are reported through the NMA system.

- *Issue 8-59:* If the ALL option was used when setting port parameters on PSM cards, the parameter information was stored in volatile memory. If the MIS card was then removed and reinstalled in the shelf, the PSM was set to minor alarm attributes on all parameters.

*Correction:* PSM card port parameters are stored in nonvolatile memory.

- *Issue 8-60:* If a GPS-LOS or GPS-INVALID condition type occurred, an alarm severity change from minor to major was not reported, causing a mismatch between the TL1 alarm severity and the GTI card front panel display.

*Correction:* If a GPS-LOS or GPS-INVALID condition type occurs, an alarm severity change from minor to major is reported.

**4. KNOWN ISSUES**

**4.01** This release of the MIS card software includes the following known issues:

- *Issue 8-39:* Provisioning an expansion shelf directly through a communication port on the expansion shelf may cause the MIS card in the expansion shelf to stop communicating.

*Work-around:* If this occurs, pull the MIS card with the communication problem out of the shelf, then plug it back in. To avoid this issue, provision all shelves through the MIS card in the master shelf.

- *Issue 8-61:* If MRC or PSM card ports are removed from service with the ALL option while the ports have active port alarms, the port alarms may or may not be cleared.

*Work-around:* If the port alarms are not cleared, repeat the command, or remove the ports from service one at a time.

- *Issue 8-62:* Occasionally, unequipped alarms may be generated for GTI cards, or all commands to the GTI cards may be denied with an error code of SROF or SARB.

*Work-around:* None.

- *Issue 8-63:* If an MRC card port receives an AIS, unframed, all-ones signal, an AIS and an OOF alarm are generated. While the AIS alarm is active, within 15 to 60 minutes, a BPV alarm is generated (when all performance-monitoring functions should have been disabled).

*Work-around:* None.

- *Issue 8-65:* The ED-SSM-MSG and RTRV-SSM-MSG commands are not functional in this release.

*Work-around:* None.

**5. ESTIMATED DOWN TIME**

**5.01** Not applicable.

**6. ESTIMATED INSTALLATION TIME**

**6.01** Approximately 1 hour is required to install this software release.

**7. REQUIREMENTS**

**7.01** The hardware, software, and documentation required to operate this software release is listed below.

**A. Hardware**

**7.02** An MIS card (part number 090-44018-05 or 090-45018-05) must be installed in the shelf to receive this software release.

**7.03** Some cards have specific software revision (listed on the card front panel) requirements in order to be compatible with this software release. Table A lists the cards, including part number, and the software revision required. Cards with higher revisions can also be used.

**B. Software**

**7.04** No additional software is required for this software release.

**C. Documentation**

**7.05** Use either of the manuals / revisions listed below. Higher revision manuals can also be used.

<u>Manual</u>	<u>Part Number</u>	<u>Revision</u>
TL1 User's Guide	997-44018-08	A
TL1 User's Guide	997-45018-08	A

**8. INSTALLATION**

**8.01** To install this software release from a floppy disk, follow the procedure in Chart 1. Repeat the procedure in Chart 1 for *each* shelf where this software is to be installed.

Table A. Card Requirements

CARD	PART NUMBER	SOFTWARE REVISION
MRC-EA <sup>V5</sup>	090-45010-56	B
MRC-EA/C <sup>V5</sup>	090-44010-56	B
MRC-T <sup>V5</sup>	090-45010-53	B
TO-EA5 <sup>V5</sup>	090-45029-51	C
TO-EA5/C <sup>V5</sup>	090-44029-51	D
TOTA-5 <sup>V5</sup>	090-45012-52	D
GTI	090-42140-13	E
GTI	090-42140-14	E
GTI	090-42140-15	B
GTI	090-44140-14	E

Note: The <sup>V5</sup> indicates that the card is a Version 5 card.

Chart 1. Software Installation Procedure

STEP	PROCEDURE
<p>This chart provides the steps for copying an MIS card program from an external source to the MIS card.</p> <p><b>Prerequisites:</b></p> <ol style="list-style-type: none"> <li>1. The MIS card to which the software will be downloaded has a part number of 090-44018-05 or 090-45018-05.</li> <li>2. The PC from which this software will be installed is running in a VT100 terminal mode.</li> <li>3. The PC from which this software will be installed is running a commercial software communication package (such as PROCOMM PLUS) that supports the KERMIT protocol.</li> <li>4. The PC from which this software will be installed must be connected to any available communications port on the shelf where the MIS card resides.</li> </ol>	
1	<p>Create a directory on the hard drive of the PC, and copy the files from both disks (092-45118-51 and 092-45218-51) to the newly created directory.</p>
2	<p>Access level 1 is required to use the command in this step. Determine the setting for echo on the communication port to be used by entering the following:</p> <pre>RTRV-COM: [&lt;tid&gt;]:&lt;aid&gt;:&lt;ctag&gt;;</pre> <p>aid = communication port to be used to copy the program:              COM-1 = communication port 1 (backplane D connector)              COM-2 = communication port 2 (backplane D connector or front panel RJ connector)              COM-3 = communication port 3 (backplane D connector)</p> <p>Response:</p> <pre>&lt;sid&gt; &lt;date&gt; &lt;time&gt; M &lt;ctag&gt; COMPLD   "&lt;aid&gt;" /*BAUD=&lt;value&gt;,MONMSG=&lt;value&gt;,KEEPALIVE=&lt;value&gt;,   COMTYPE=&lt;value&gt;,ENDOFTEXT=&lt;value&gt;,ECHO=&lt;value&gt;,   COMPRI=&lt;value&gt;,HWCONTROL=&lt;value&gt;,   SWCONTROL=&lt;value&gt;,DUR=&lt;value&gt; ...*/</pre> <p>where the value for the echo parameter is ALW or INH.</p>

Chart 1. Software Installation Procedure (Contd)

STEP	PROCEDURE
3	<p>Access level 3 is required to use the command in this step. If the echo parameter is set to INH (inhibited), skip to the next step. If the echo parameter is set to ALW (allowed), set the echo to INH by entering:</p> <pre>ED-COM: [&lt;tid&gt;] :&lt;aid&gt;:&lt;ctag&gt;::,,,,, INH,,,,;</pre> <p>aid = communication port to be used to copy the program:  COM-1 = communication port 1 (backplane D connector)  COM-2 = communication port 2 (backplane D connector or front panel RJ connector)  COM-3 = communication port 3 (backplane D connector)</p> <p>Response:</p> <pre>&lt;sid&gt; &lt;date&gt; &lt;time&gt; M &lt;ctag&gt; COMPLD</pre>
4	<p>Access level 2 is required to use the command in this step. Determine which program location (HI BANK or LOW BANK) is active (ACTIVE) in the MIS card by entering:</p> <pre>RTRV-INVENTORY: [&lt;tid&gt;] :&lt;aid&gt;:&lt;ctag&gt;;</pre> <p>aid = ADMIN</p> <p>Response:</p> <pre>&lt;sid&gt; &lt;date&gt; &lt;time&gt; M &lt;ctag&gt; COMPLD "&lt;aid&gt;" /* CARD=&lt;value&gt;, TYPE=&lt;value&gt;, PART=&lt;value&gt;, CLEI=&lt;value&gt;, SERIAL=&lt;value&gt;, HARDREV=&lt;value&gt;, LOW_BANK_SW=&lt;value&gt;: SOFTREV=&lt;value&gt;, SOFTVER=&lt;value&gt;, HI_BANK_SW=&lt;value&gt;: SOFTREV=&lt;value&gt;, SOFTVER=&lt;value&gt; */</pre> <p>where the value for either the LOW_BANK_SW or the HI_BANK_SW is ACTIVE (the active status will be used later in this procedure).</p>

Chart 1. Software Installation Procedure (Contd)

STEP	PROCEDURE																		
5	Set the KERMIT protocol parameters as follows: <table style="margin-left: 40px; border: none;"> <tr><td>Control quote:</td><td>35</td></tr> <tr><td>Pad:</td><td>0</td></tr> <tr><td>End of line:</td><td>13</td></tr> <tr><td>8th bit quote:</td><td>38</td></tr> <tr><td>Block start:</td><td>1</td></tr> <tr><td>Maximum packet size:</td><td>512</td></tr> <tr><td>Number of pad characters:</td><td>0</td></tr> <tr><td>File type:</td><td>Binary</td></tr> <tr><td>Block check type:</td><td>3-byte CRC</td></tr> </table>	Control quote:	35	Pad:	0	End of line:	13	8th bit quote:	38	Block start:	1	Maximum packet size:	512	Number of pad characters:	0	File type:	Binary	Block check type:	3-byte CRC
Control quote:	35																		
Pad:	0																		
End of line:	13																		
8th bit quote:	38																		
Block start:	1																		
Maximum packet size:	512																		
Number of pad characters:	0																		
File type:	Binary																		
Block check type:	3-byte CRC																		
6	Access level 4 is required to use the command in this step. Enter: <pre style="margin-left: 40px;">           CPY-MEM: [&lt;tid&gt;] ::&lt;ctag&gt;::, FROM-EXT, , TO-MIS:PGM;           </pre> Response: <pre style="margin-left: 40px;">           &lt;sid&gt; &lt;date&gt; &lt;time&gt;           M &lt;ctag&gt; COMPLD           </pre>																		
7	<p><b>Caution: If the program download is interrupted before completion, the inactive bank will be empty. Any program residing in the inactive bank will be lost. Do not interrupt the download.</b></p> <p>Transmit one of the following files from the directory created in Step 5 to the inactive memory bank in the MIS card:</p> <p style="margin-left: 40px;">If the LOW BANK is active (as determined in Step 4), transmit the HI file (which has a file-name in the format of &lt;xxxxxx.HI).</p> <p style="margin-left: 40px;">If the HI BANK is active (as determined in Step 4), transmit the LOW file (which has a file-name in the format of &lt;xxxxxx.LOW).</p>																		
8	Wait until the communication software indicates that the copying has been completed (may take up to 8 minutes).																		
9	Access level 5 is required to use the command in this step. To cause the MIS card to use the program just copied to the MIS card, the active program must be switched by entering the following command: <pre style="margin-left: 40px;">           INIT-SYS: [&lt;tid&gt;] :&lt;aid&gt;:&lt;ctag&gt;::5;           aid = MIS           </pre> Response: <pre style="margin-left: 40px;">           &lt;sid&gt; &lt;date&gt; &lt;time&gt;           M &lt;ctag&gt; COMPLD           </pre>																		
10	This procedure is completed.																		