

**MIS CARD (090-45018-05)**  
**SOFTWARE RELEASE DOCUMENT**  
**RELEASE 5.05.02**

CONTENTS	PAGE
1. GENERAL .....	1
2. NEW FEATURES .....	1
3. KNOWN ISSUES .....	1
4. ESTIMATED DOWN TIME .....	2
5. ESTIMATED INSTALLATION TIME .....	3
6. REQUIREMENTS .....	3
A. Hardware .....	3
B. Software .....	3
C. Documentation .....	3
7. INSTALLATION .....	3
 Tables	
A. Cards Supported by MIS Version 5.05.02	4
 Charts	
1. Software Installation Procedure .....	5

**1. GENERAL**

**1.01** This document provides information about Release 5.05.02 of the software for Symmetricom's MIS card (part number 090-45018-05).

**1.02** This document has been reissued to update known issues.

**1.03** Symmetricom is a registered trademark and DCD is a trademark of Symmetricom, Inc. All other product names, service marks, trademarks, and registered trademarks used in this document are the property of their respective owners.

**2. NEW FEATURES**

**2.01** None.

**3. KNOWN ISSUES**

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

- *Issue 8-90:* The MIS to X.25 operation is supported only in applications where an X.25 permanent virtual circuit (PVC) is used. A switched virtual circuit (SVC) operation, where a session is established upon alarm reporting from the DCD shelf to the network manager, is not supported. Likewise, an SVC operation is not supported when establishing a session from the network manager to the PAD connected to the DCD shelf.

*Work-around:* Use the X.25 in PVC mode only. This is done by establishing an X.25 session from the network management system to the PAD connected to the DCD shelf. The session should remain open at all times to support management functions.

- *Issue 9-46:* An "override" message set on a TO card will not clear automatically after a 1:N protection switch occurs and is then released. Example: An override message on TO-x is set to QL-ST3. The TO-x card is physically unplugged from the shelf. TO-x properly transfers to HS-1 (TO-11) and a QL-ST3 message is transmitted. The 1:N transfer is released by re-inserting TO-x into the shelf and releasing the 1:N protection switch. A second 1:N transfer is initiated with a TO-x card that is transmitting a QL-PRS message. This time the QL-ST3 message is transmitted by HS-1 (TO-11) card rather than the QL-PRS. This condition only occurs if the TO-x card originally contains an "override" QL message.

*Work-around:* If an “override” QL message is used to force a QL message on a TO-x card AND a 1:N protection switch occurs, the HS (TO-11 or TO-12) card must be fully removed from the MIS database and re-entered. This should be done by using the RMV-PORT, RMV-EQPT, DLT-PORT, and DL-EQPT commands followed by the ENT-EQPT, ENT-PORT, RST-EQPT, and RST-PORT commands. The status of the HS slots can be verified by using the RTRV-MSG-EQPT command.

- *Issue 9-64:* The TO-EA5 card becomes confused and does not operate properly when changed from 1:1 to 1+1 mode. The card creates a mismatch by changing framing and clears the mismatch by re-provisioning framing, with only one card active.

*Work-around:* Do not create a mismatch. To change from 1:1 to 1+1 mode, set both cards to NO mode first, then change from NO to 1+1.

- *Issue 9-65:* A TO-EA5 card, if used in 1:1 mode and one of the paired cards is misprovisioned, generates a minor alarm instead of a database mismatch.

*Work-around:* If a minor alarm is created, clear the alarm by re-provisioning a matched pair of cards to be identical. A mismatch CL message should be generated. The minor alarm is also cleared.

- *Issue 9-69:* The TO-1 and TO-2 cards operate in 1:1 protection mode. When the active TO card is removed and replaced, outputs become disabled for 10 seconds and then the TO-2 card becomes active.

*Work-around:* Never remove the active card. Switch the active card status using the TL-1 message command.

- *Issue 9-83:* With the OPR-PROTNSW command active and the HS2 (TO-12) TO-EAN card protected, the HS2 card is removed from the shelf. After receiving the “unequipped” message, the HS2 card is re-inserted. The output ports are squelched for several minutes before the MCA-5M re-provisions all HS2 ports.

*Work-around:* Do not remove the HS2 card during a protection switch.

- *Issue 9-92:* The MIS automatically places a TOTA-5 or TOTA-M card in service if the cards are inserted in the HS1 or HS2 slot. The MIS allows the MCA-5/MCA-5M cards to perform provisioning. The TOTA-5/TOTA-M cards can only be used as HS cards in HS1 or HS2 slots.

*Work-around:* None.

- *Issue 10-20:* On the MRC-xx card, CRC errors are ignored unless the threshold is set significantly low, for example, one tenth of the expected value.

*Work-around:* None.

- *Issue 10-21:* On the MRC-xx card, BPV errors are ignored unless the threshold is set significantly low, for example, one tenth of the expected value.

*Work-around:* None.

- *Issue 10-43:* The GTI card does not refresh the serial number in the MIS if the MIS switch 1-5 is down using the CPY-MEM From -ALL to MIS command to place the GTI card in service.

*Work-around:* Use the CPY-MEM GTI-X command to refresh the serial number in the MIS, or ENT-EQPT and RST-EQPT commands.

- *Issue 10-44:* The analog output of the GTI-18 card causes the output light to display red and generates a shelf minor alarm.

*Work-around:* The GTI-18 card should not be used in analog mode. Only the E1 mode is supported.

- *Issue 10-47:* The EA-20 card does not support ports 11 through 20 so that an ENT-EQPT will work for individual ports in the 11-20 port range.

*Work-around:* Use range commands where the low end of the range is port 10 or less and the high end of the range is 11-20. Example:  
ENT-EQPT::to-4-9&&-18:CTAG;

#### 4. ESTIMATED DOWN TIME

4.01 Not applicable.

## 5. ESTIMATED INSTALLATION TIME

**5.01** Approximately 30 minutes is required to install this software release.

## 6. REQUIREMENTS

**6.01** The hardware, software, and documentation required to operate this software release is listed as follows.

### A. Hardware

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

**6.03** Table A lists the cards supported by MIS version 5.05.02; Version 5 cards are marked with a <sup>V5</sup>.

**6.04** Some non-Version 5 cards are incompatible with Version 5 cards. Refer to the manual that came with the equipment.

### B. Software

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

### C. Documentation

**6.06** 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	997-45018-08	A

## 7. INSTALLATION

**7.01** 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. Cards Supported by MIS Version 5.05.02

CARD	PART NUMBER
<b>INPUT CARDS</b>	
DCIM-EA <sup>V5</sup>	090-45010-59
MRC-EA <sup>V5</sup>	090-45010-56 090-45010-57
MRC-EA/C <sup>V5</sup>	090-44010-56 090-44010-57
MRC-T <sup>V5</sup>	090-45010-53 090-45010-58
<b>MONITOR CARDS</b>	
PSM-EA <sup>V5</sup>	090-45025-54
PSM-T <sup>V5</sup>	090-45025-51
PSM-T5S <sup>V5</sup>	090-45025-53
<b>TIMING OUTPUT CARDS</b>	
TO-EA5 <sup>V5</sup>	090-45029-51
TO-EA5/C <sup>V5</sup>	090-44029-51
TO-EAN <sup>V5</sup>	090-45029-56
TOTA-5 <sup>V5</sup>	090-45012-52
TOTA-M <sup>V5</sup>	090-45012-53
<b>PROTECTION CARDS</b>	
MCA-5	090-45015-01
MCA-5M <sup>V5</sup>	090-45015-55
<b>LPR SHELF CARDS</b>	
GTI <sup>V5</sup>	090-42140-13, software revision E or higher 090-42140-14, software revision E or higher 090-42140-15, software revision B or higher 090-45140-15, software revision B or higher 090-42140-17, software revision B or higher 090-42140-18, software revision B or higher
GTI/C <sup>V5</sup>	090-44140-14, software revision E or higher 090-44140-16, software revision B or higher 090-44140-18, software revision B or higher

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 090-45018-05.</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 (092-45118-52 and 092-45218-52) 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:</p> <ul style="list-style-type: none"> <li>COM-1 = communication port 1 (backplane D connector)</li> <li>COM-2 = communication port 2 (backplane D connector or front panel RJ connector)</li> <li>COM-3 = communication port 3 (backplane D connector)</li> </ul> <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 (Cont'd)

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 (Cont'd)

STEP	PROCEDURE																		
5	Set the KERMIT protocol parameters as follows: <table style="margin-left: 40px;"> <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>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>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.																		