

MIS CARD (090-44018-05 & 090-45018-05)
SOFTWARE RELEASE DOCUMENT
RELEASE 5.02.02

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1. GENERAL

1.01 This document provides information about Release 5.02.02 of the software for Telecom Solutions' MIS card (part numbers 090-44018-05 and 090-45018-05).

1.02 This document has been reissued for the reasons listed below. Changes are marked by change bars (except deleted material).

- A statement of the condition description changing for the UNEQUIPPED condition type was deleted from the list of new features.
- The fix for bug 688 was changed.
- The part number for the TL1 User's Guides in Part 7C was changed.
- The <aid> in Step 4 of Chart 1 was changed.

2. NEW FEATURES

2.01 This release of the MIS card software includes the following new features:

- Two alarm condition types (GPMJ and GPMN) and associated condition descriptions (GENERAL PURPOSE MAJOR ALARM ON SHELF and GENERAL PURPOSE MINOR ALARM ON SHELF) were added. The associated clear (CL) messages were also added.
- Two commands (SET-REPTMODE-PORT and RTRV-REPTMODE-PORT) were added to allow port alarms to be reported with equipment alarms or separately as port alarms
- An additional field was added to the ED-COM command to set the time after which a user is logged off if there is no activity.
- A parameter value of 3 was added to the phase parameter of the INIT-SYS command. This parameter deletes the card database on the MIS card without affecting the SID, security, or communication port parameters.
- The ability to retrieve port alarms from MRC, PSM, and TO cards was added.
- The factory setting for the communication type is now TERM1 for communication ports 1 and 3, and TERM2 for communication port 2.
- Alarm support, autonomous messages, the RTRV-LOG command, and the RTRV-ALM-SHELF command are supported for DCD-400 and DCD-ST2 expansion shelves.

3. CORRECTIONS

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

- *Bug #633:* When a command was issued to set the TOTA-5 card for 1:1 operation, an error code of ENPS was issued.

Fix: When a command is issued to set the TOTA-5 card for 1:1 operation, an error code of IDNV is issued.

- *Bug #634:* Inventory data returned from slots HS1 and HS2 was corrupted.

Fix: Inventory data returned from slots HS1 and HS2 is not corrupted.

- *Bug #637 & #661:* When in-service cards were pulled from the shelf, the appropriate unequipped alarm was issued, but the MIS card maintained the card inventory data.

Fix: When in-service cards are pulled from the shelf, the appropriate unequipped alarm is issued, and the MIS card inventory data shows unequipped for the serial number, CLEI code, hardware revision, software revision, and software version fields in response to the RTRV-INVENTORY command.

- *Bug #643:* Standing condition (SC) and clear (CL) messages were not always reported for MRC cards that had been power cycled.

Fix: Standing condition (SC) and clear (CL) messages are always reported for MRC cards that had been power cycled.

- *Bug #645:* When all 4-kHz references were missing, only a major (not critical) alarm was not declared.

Fix: When all 4-kHz references are missing, a critical alarm is declared.

- *Bug #685:* The condition type GTR-SIG-LOS and the corresponding condition description LOSS OF SIGNAL FROM GTR were reported when the signal from the GTR was lost.

Fix: The condition type GTR-GPS-LOS and the corresponding condition description LOSS OF GPS SIGNAL FROM GTR are reported when the signal from the GTR signal is lost.

- *Bug #685, #686, & #687:* The condition type LOS and the corresponding condition description LOSS OF TIMING OUTPUT SIGNAL were reported when the signal from the GTI was lost.

Fix: The condition type GTI-OUT-FAIL and the corresponding condition description LOSS OF TIMING OUTPUT SIGNAL are reported when the signal from the GTI is lost.

- *Bug #685, #686, & #687:* The condition type SIGNAL-DEFECT and the corresponding condition description GTR LOCATION, SKY PROBLEM, OR GND/OSCILLATOR NOISE were reported when the GPS signal was invalid.

Fix: The condition type GPS-INVALID and the corresponding condition description GPS INVALID are reported when the GPS signal is invalid.

- *Bug #685, #686, & #687:* For the condition type CONVERGING, the corresponding condition description TIMING SIGNAL NOT YET STABLE (SKY PROBLEM) was reported.

Fix: For the condition type CONVERGING, the corresponding condition description TIMING SIGNAL NOT YET STABLE is reported.

- *Bug #686:* The condition type SATELLITE with the corresponding condition description INSUFFICIENT SATELLITES IN VIEW <3 was reported as a minor alarm (MN).

Fix: The condition type SATELLITE with the corresponding condition description INSUFFICIENT SATELLITES IN VIEW <3 is reported as a standing condition (SC).

- *Bug #686:* The condition type `FREQ-TOL` with the corresponding condition description `GPS FREQUENCY OUT OF TOLERANCE` was reported as a minor alarm (MN).

Fix: The condition type `FREQ-TOL` with the corresponding condition description `GPS FREQUENCY OUT OF TOLERANCE` is reported as a standing condition (SC).

- *Bug #688:* For all cards other than GTI and LTI cards, the condition description for the condition type `UNEQUIPPED` was `CARD IS MISSING`.

Fix: For all cards other than GTI and LTI cards, the condition description for the condition type `UNEQUIPPED` is `IMPROPER CARD REMOVAL`.

- *Bug #689:* For GTI and LTI cards only, the condition description for the condition type `UNEQUIPPED` was `CARD IS MISSING`.

Fix: For GTI and LTI cards only, the condition description for the condition type `UNEQUIPPED` is `IMPROPER CARD REMOVAL OR COMM FAILURE`.

- *Bug #696:* Following a `INIT-SYS` level 5 command, a complete message string was not generated.

Fix: Following a `INIT-SYS` level 5 command, a complete message string is generated.

- *Bug #620:* When the port framing of an MRC card was changed, the port alarm attributes changed to minor alarm regardless of how the port alarm attributes were previously set.

Fix: When the port framing of an MRC card was changed, the port alarm attributes retain any previous setting.

- *Bug #654 & #658:* When the signal type of an MRC card port was changed from digital to analog to digital, the digital port alarm attributes changed to the factory settings regardless of how the digital port alarm attributes were previously set.

Fix: When the signal type of an MRC card port is changed from digital to analog to digital, the digital port alarm attributes retain any previously setting.

- *Bug #654 & #658:* When the signal type of an MRC card port was set for analog, digital framing parameters were displayed in response to the `RTRV-PORT` command.

Fix: When the signal type of an MRC card port is set for analog, analog framing parameters are displayed in response to the `RTRV-PORT` command.

- *Bug #683 & #697:* In the `SET-SID` command, leading zeros could not be entered after a hyphen.

Fix: In the `SET-SID` command, leading zeros or any combination of alpha-numeric characters can be entered after a hyphen.

- *Bug #623, #647, #679, & #690:* Inventory information that was entered at the factory could not be retrieved properly.

Fix: Inventory information that is entered at the factory is retrieved properly.

- *Bug #703:* In response to the `RTRV-EQPT` command, the `CAS4` framing type was not always reported accurately.

Fix: In response to the `RTRV-EQPT` command, the `CAS4` framing type is now reported accurately.

- *Bug #709:* When all four 4-kHz references (from the input cards and the clock cards) of a PSM card were lost, a LOSS OF ALL EXTERNAL INPUT REFERENCES alarm was generated

Fix: When all four 4-kHz references (from the input cards and the clock cards) of a PSM card are lost, a CARD FAIL:CLOCK SYNTHESIZER FAILURE alarm is generated.

- *Bug #711:* Characters other than alpha characters were accepted as the beginning character for the parameters AID, PID, new PID, and new UID.

Fix: All commands containing a parameter of AID, PID, new PID, or new UID that begins with any character other than an alpha character are denied.

- *Bug #713:* If the same ENT-INVENTORY command to a card was repeated, the command was executed again.

Fix: If the same ENT-INVENTORY command to a card is repeated, the command is denied with an error message of DENY IEAE.

- *Bug #717:* If the GTI-2 card is entered into the database before the GTI-1 card is entered into the database, the GTI-2 card is not recognized.

Fix: All GTI cards entered into the database are recognized regardless of the order entered.

- *Bug #725:* A value of 00 was accepted as a valid value for date, month, and day with the ED-DAT command.

Fix: A value of 00 is not accepted as a valid value for date, month, and day with the ED-DAT command.

- *Bug #728:* When the following occurred on an in-service shelf:
 - shelf power was lost
 - the cards were switched from one position to another
 - shelf power was restored
 - a CPY-MEM command was used from the MIS card to the other cards
 the MIS card did not indicate a database mismatch, but the RTRV-INVENTORY command indicated information for the cards as they were before the card rearrangement.

Fix: When the following occurs on an in-service shelf:

- shelf power is lost
- the cards are switched from one position to another
- shelf power is restored
- a CPY-MEM command is used from the MIS card to the other cards

the MIS card indicates a database mismatch, and the RTRV-INVENTORY command indicates information from previous cards until the database mismatch is cleared (by using the CPY-MEM command from the MIS card to the other cards).

- *Bug #729:* When a database mismatch occurred for MRC cards, a minor alarm was declared.

Fix: When a database mismatch occurs for MRC cards, a standing condition is declared.

- *Bug #737:* An LTI card could be entered into the card database by the ENT-EQPT command even though the LTI card was not installed or a GTI card was installed in the slot being addressed.

Fix: An LTI card cannot be entered into the card database by the ENT-EQPT command if the LTI card is not installed or if a GTI card is installed in the slot being addressed.

4. KNOWN PROBLEMS

4.01 The following known problem exists:

- *Bug #681:* Full X.25 communication support is not available.

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 use all the features in 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 shown below. Higher revision manuals can also be used.

<u>Manual</u>	<u>Part Number</u>	<u>Revision</u>
TL1 User's Guide	997-44018-05	A
TL1 User's Guide	997-45018-05	A

8. INSTALLATION PROCEDURE

8.01 If equipped with an MIS card with a part number of 090-44018-05 or 090-45018-05 and a software revision of B (marked on the front panel of the card), this software release is factory installed on the MIS card. To install this software release from a floppy disk, follow the procedure in Chart 1.

Table A. Card Requirements

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

Chart 1. Copy Program from External Source to MIS Card

STEP	PROCEDURE
	<p>This chart provides the steps for copying an MIS card program from an external source to the MIS card.</p> <p>Prerequisites:</p> <ol style="list-style-type: none"> The MIS card to which the software will be downloaded must have a part number of 090-44018-05 or 090-45018-05. The PC from which this software release will be installed is running in a VT100 terminal mode. The PC from which this software release will be installed is running a commercial software communication package (such as PROCOMM PLUS®) that supports the KERMIT protocol.
1	<p>Create a directory on the hard drive of the PC, and copy the files from both disks (092-45118-22 and 092-45218-22) 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:[<tid>]:<aid>:<ctag>;</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><sid> <date> <time> M <ctag> COMPLD "<aid>" /*BAUD=<value>,MONMSG=<value>,KEEPALIVE=<value>, COMTYPE=<value>,ENDOFTEXT=<value>,ECHO=<value>, COMPRI=<value>,HWCONTROL=<value>, SWCONTROL=<value>,DUR=<value> ...*/</pre> <p>where the value for the echo parameter is ALW or INH.</p>
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:[<tid>]:<aid>:<ctag>::,,,,,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><sid> <date> <time> M <ctag> COMPLD</pre>

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Chart 1. Copy Program from External Source to MIS Card (Contd)

STEP	PROCEDURE
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:[<tid>]:<aid>:<ctag>; aid = ADMIN</pre> <p>Response:</p> <pre><sid> <date> <time> M <ctag> COMPLD " <aid> " /* CARD=<value>, TYPE=<value>, PART=<value>, CLEI=<value>, SERIAL=<value>, HARDREV=<value>, LOW_BANK_SW=<value>: SOFTREV=<value>, SOFTVER=<value>, HI_BANK_SW=<value>: SOFTREV=<value>, SOFTVER=<value> */</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>
5	<p>Set the KERMIT protocol parameters as follows:</p> <pre>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</pre>

Chart 1. Copy Program from External Source to MIS Card (Contd)

STEP	PROCEDURE
6	<p>Access level 4 is required to use the command in this step. Enter:</p> <pre>CPY-MEM:[<tid>]:<aid>:<ctag>::,FROM-EXT,,TO-MIS:PGM;</pre> <p style="margin-left: 40px;">aid = shelf where MIS card resides: (null) = master shelf E1 = expansion shelf 1 E2 = expansion shelf 2 E3 = expansion shelf 3 (or remote shelf if equipped with a remote shelf instead of an expansion shelf 3)</p> <p>Response:</p> <pre><sid> <date> <time> M <ctag> COMPLD</pre>
7	<p>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.</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 50202.hi file. If the HI BANK is active (as determined in Step 4), transmit the 50202.low file.</p>
8	<p>Wait until the communication software indicates that the copying has been completed (may take up to 8 minutes).</p>
9	<p>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:</p> <pre>INIT-SYS:[<tid>]:<aid>:<ctag>::5;</pre> <p style="margin-left: 40px;">aid = MIS</p> <p>Response:</p> <pre><sid> <date> <time> M <ctag> COMPLD</pre>
10	<p>This procedure is completed.</p>