

Appendix A

Related Publications

RELATED PUBLICATIONS

MEMOREX TELEX PUBLICATIONS

- 1374 ACS Operations Manual (1374000001M6)
- 1374 Central Site Customization Guide (1374000001M7)
- 1374 Configuration Guide (1374000001M2)
- 1374 LAN Operations Manual (1374000001M4)
- 1374 Offline Utility Operations Manual (1374000001M3)
- 1374 Product Family Guide (1374000001M1)
- 1374 Product Service Manual (1374000001M8)
- 1374 Troubleshooting Guide (1374000001M9)
- 1374 X.25 Operations Manual (1374000001M5)

IBM PUBLICATIONS

- ACF/VTAM Library Supplement for X.25 Packet-Switching Data Network Support (LY30-5568)
- ACF/VTAM Planning and Installation Reference (ST27-0610)
- IBM Cabling System Planning and Installation Guide (GA27-3361)
- IBM 3174 Subsystem Control Unit Functional Description (GA23-0218)
- IBM 3270 Information Display System Character Set Reference (GA27-2837)
- IBM 3270 Information Display System Keyboard Definition Utility User's Guide
- IBM 3710/X.25 Implementation Primer (GG24-1969-0)
- IBM 4300 X.25 Comm Adapter Support Implementation Guide (GG24-1675-0)
- Series/1 for use in X.25 Networks (GG24-1651-0)
- Token-Ring Network Introduction and Planning Guide (GA27-3677)

RELATED PUBLICATIONS

Tuning Considerations of IBM SNA X.25 DTE's (GG24-1646-00)

VTAM X.25 Communication Adapter Support (SC33-6171-0)

X.25 Interface for Attaching SNA Nodes to Packet-Switched Data Networks General Information Manual (GA27-3345)

X.25 NPSI Diagnosis Reference (LY30-3073-3)

X.25 NPSI General Information (GC30-3189-3)

X.25 NPSI Installation and Operation (SC30-3201-3)

X.25 NPSI PAD Implementation Guide (GG24-1569-0)

X.25 NPSI Release 2 and 3 Guide (GG24-1567-0)

X.25 SNA Guide (GG24-1568-1)

ANSI/IEEE PUBLICATIONS

ANSI/IEEE Standard 802.5-1985

For local area networks employing token passing as the access method.

INTEL PUBLICATIONS

Intel Corporation iAPX 186/188 User's Manual

Intel Corporation iAPX 186 Data Sheet

LAN Components User's Manual

82586 Local Area Network Coprocessor Data Sheet

TEXAS INSTRUMENTS PUBLICATIONS

TMS380 Adapter Chipset User's Guide and Supplement

Appendix B

Check Error Codes

CHECK ERROR CODES

MACHINE CHECK ERRORS

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
202	--	DC/US	Internal terminal error. Display caused keystroke/status buffer overflow.	Power off/reset the terminal.
204	--	DC/US	Terminal buffer parity error. Terminal may have been disabled by the control unit.	Press the Reset key. Power off/on the device.
207	--	DC/US	Loss of coax communications.	Power off/on the device.
208	--	--	Invalid operation completed. Asynchronous ending status received when an operation requiring it was in progress.	Press the Reset key and retry the operation.
210	--	--	Invalid keyboard attached. Terminal ID does not match the types selected during customization or the table is not available for the keyboard type.	Verify the keyboard configuration. Press the Reset key and retry the operation.
212	--	--	Terminal keyboard error. Invalid keystroke was entered.	Press the Reset key and retry the operation.
2%%	--	--	The keyboard type is not supported.	Verify the keyboard configuration. Press the Reset key and retry the operation.
315	--	--	Channel adapter failure.	Report to the system administrator. Power the device off/on.
331	--	--	Link adapter failure (SDLC). Control unit internal fault.	Report this error to the system administrator. Power off/on the control unit.
341	--	--	Initialization failure or Token-Ring adapter check.	Press the Reset key. If the error continues, replace the Token-Ring adapter.
401	--	OP.CK.	Invalid command sequence (BSC). Host sent invalid command parameters.	Host recovery. Press the Reset key and retry the operation.

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
401	1003- 1005	--	SFAP data stream error. Host software problem.	Press the Reset key and retry the operation. Inform the system administrator.
401	1003	COM.REJ.	Command reject. Invalid command from the host.	Press the Reset key and retry the operation.
402	1003	OP.CK.	Undefined code point. Host software problem.	Press the Reset key and retry the operation. Inform the system administrator.
402	1003	OP.CK.	Invalid or out-of-range data. The host sent invalid data after RD, RD modified, or EAU.	Press the Reset key and retry the operation.
402	1005	OP.CK.	Invalid parameters with the host program command code.	Press the Reset key and retry the operation.
402	1005	OP.CK.	SBA/RA/EAU/SF order without valid parameters. The host sent SBA, RA, EAU, or SF order without required data bytes.	Host recovery. Press the Reset key and retry the operation.
404	084C	OP.CK.	Color plane/P.S. font error. Host software problem.	Press the Reset key and retry the operation. Inform the system administrator.
407	--	OP.CK.	Invalid copy command (BSC). The host sent copy command with invalid parameters.	Host recovery. Press the Reset key and retry the operation.
407	--	OP.CK.	Copy command error (BSC). Buffer locked.	Press the Reset key and retry the operation.
410	1002	--	RU length error. SNA RU received with a size greater than the maximum.	Press the Reset key and retry the operation.
410	1003	--	Function not supported. A host software problem.	Press the Reset key and retry the operation.
415	4006	--	Exception response not allowed. The host sent invalid or incorrect data, or last in chain carried exception response when bind specified definite response.	Press the Reset key and retry the operation. Inform the system administrator.

CHECK ERROR CODES

Sense Codes				
Code	SNA	Non-SNA	Probable Cause	Corrective Action
415	4007	--	Definite response not allowed. Host sent invalid or incorrect data, or last in chain carried definite response when bind specified exception response.	Press the Reset key and retry the operation. Inform the system administrator.
415	400F	--	Format indicator bit not allowed. Host software program check.	Press the Reset key and retry the operation. Inform the system administrator.
416	2001	--	Sequence number error. Host software problem.	Press the Reset key and retry the operation.
416	2002	--	Chaining error. Host software problem.	Press the Reset key and retry the operation.
416	2003	--	Brackets rule violation. Host software problem.	Press the Reset key and retry the operation.
416	2005	--	Data traffic reset. Host software problem.	Press the Reset key and retry the operation.
416	2004	--	Direction error. Host software problem.	Press the Reset key and retry the operation.
418	0829	--	Change direction required. Host software SNA program check.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind reject – invalid screen size.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind reject – secondary protocol error. Host software SNA program check; invalid session parameter.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind reject – common protocol error. Host software SNA program check; invalid session parameter.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind command reject. Host software problem.	Press the Reset key and retry the operation. Inform the system administrator.

CHECK ERROR CODES

Code	Sense Codes		Probable Cause	Corrective Action
	SNA	Non-SNA		
420	0821	--	Bind reject – LU profile error. Host software SNA program check; invalid session parameter.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind reject – LU1 error. Host software SNA program check; invalid session parameter.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind reject – encrypt/decrypt parameter error. Host software SNA program check; invalid session parameter. Improper encrypt/decrypt specification or crypto verification received in invalid state.	Press the Reset key and retry the operation. Inform the system administrator. Nonencrypt/decrypt operations may be run.
460	--	--	Invalid host-loaded Printer Authorization Matrix.	Press the Reset key and retry the operation. Inform the system administrator.
497	--	--	Segmenting error. SNA segment received with improper sequencing in transmission header.	Host recovery. SNRM required.
499	--	--	Exception request. Host software SNA program check. No SNA sense returned.	Press the Reset key and retry the operation. Inform the system administrator.
501	--	--	DSR line dropped (remote). Data set ready line to modem is not active.	Press the Reset key and retry the operation. Check the modem.
504	--	--	Disconnect received.	Try to reestablish the connection.
505	--	--	Invalid connect parameter. Host sent connect with odd number buffer length or buffer size too small.	Host recovery. New connect with valid data required.
505	--	--	Connect RCVD while connected. Host sent connect command while PU already connected.	Host recovery. ACTPU required.
505	--	--	Connection required. Prior connect problem caused channel to disconnect.	Host recovery. Connect required.

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
505	--	--	Disconnect while PU active. The host sent connect command while PU active.	Host recovery. Connect required.
505	--	--	Physical unit not active. The host has not issued ACTPU.	Host recovery. ACTPU required.
506	--	--	Unproductive time-out. No host activity. Communications link may have disappeared.	Check network. Reset with valid frame or frame containing poll.
531	--	--	NAK sent (BSC). CRC error detected; or three seconds have elapsed during read operation without receiving SYN, ETB, or ETX; or a forward abort (ENQ in text) or TTD (STX-ENQ) was received.	Host recovery. Retransmit data. Communications reminder turned off on successful host retry. Check network status.
531	--	--	ENQ received (BSC). The control unit did not receive ETB/ETX with last received text block (forced host time-out); or ENQ received while unit waiting for STX or SOH (entire message lost).	Host recovery. Retransmit last message. Check network status.
532	--	--	Link connection failure. Communications problem between the host and the control unit.	Check network status. Host recovery.
532	--	--	Idle time-out. Twenty-second period of host inactivity. Communications link may have disappeared.	Reset by receipt of valid frame or frame containing a poll.
532	--	--	Idle time-out (BSC). Control unit detected seven successive three-second time-outs without SYN characters on the line while waiting for poll/selection sequence.	Host recovery. Reset by valid poll or selection sequence. Check network status.
532	--	--	Fifteen ENQs sent (BSC). The control unit did not receive response to the last text block; or the control unit has acknowledged a select sequence or text block and has waited 45 seconds without detection of pad SYN.	Host recovery. Reset by valid poll or selection sequence. Verify communications network operations. Retry operation.

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
532	--	--	Fifteen NAKs received (BSC). The control unit received 15 consecutive NAKs to its last transmission.	Host recovery. Reset by valid poll or selection sequence. Check network status. Retry the operation.
532	--	--	Fifteen incorrect NAKs received (BSC). The control unit received 15 consecutive incorrect ACK0/ACK1s to last transmission.	
532	--	--	Write-to-link time-out. DSR is OK. CTS may have dropped during transmission or clocking signal is not available from the modem.	Host recovery. SNRM required. Check the modem.
580	--	--	Unsuccessful downstream node attempt to join Token-Ring or lost Token-Ring attachment.	See the <i>1374 LAN Operations Manual</i> ; note the LCP NA command.
581	--	--	Token-Ring address with LCP NP command is already in use.	Change the address using the LCP NP command.
584	--	--	Token-Ring counter overflow.	Display counters using the LCP NS command.

IBM 3174 MACHINE CHECK ERRORS

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
240	--	--	Synchronization error based on an IBM 3179-G problem.	Power off/on the device. Wait two minutes for testing.
241	--	--	Synchronization error based on a control unit problem.	
242	--	--	IBM 3170-G permanent error reported to the IBM 3174 control unit.	
243	--	--	Against IBM 3174's function request, the IBM 3179-G does not return either function completion or expedited status.	

IBM 3179-G MACHINE CHECK ERRORS

Code	Sense Codes		Probable Cause	Corrective Action
	SNA	Non-SNA		
610	--	--	Control unit is not ready.	Check that the correct diskette is inserted and the disk drive door is closed. Complete IML. Power off/on the device. Wait two minutes for testing.
611	--	--	Diskette file ID does not match.	Check that the correct diskette is inserted into the drive.
612	--	--	Diskette file is destroyed.	Power off/on the device. Wait two minutes.
613	--	--	Diskette language ID is not supported.	
614	--	--	Diskette language ID does not match the attached keyboard type.	
615	--	--	Invalid completion code.	Press the Reset key and retry the operation.
616	--	--	Invalid TCA interrupt 1.	Power off/on the device.
617	--	--	Invalid TCA interrupt 2.	
618	--	--	Invalid external interrupt.	See the <i>IBM 3179-G Operator Reference and Problem Solving Guide</i> (GA18-2271).
619	--	--	Invalid mail parameter.	
620	--	--	Invalid keyboard scan code.	Press the Reset key and retry the operation.
621	--	--	Keyboard parity error.	See the <i>IBM 3179-G Operator Reference and Problem Solving Guide</i> (GA18-2271).
622	--	--	Keyboard time-out.	
628	--	--	Mail queue overflow.	
629	--	--	Error log overflow.	

NOTE: Error codes 610 and 611 may appear during the system configuration process.

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
630	--	--	Unknown diskette or hardware error.	Press the Reset key and retry the operation.
631	--	--	Diskette file not found.	Press the Reset key and retry the operation. Check that the correct diskette is in the device.
632	--	--	Diskette media error.	Press the Reset key and retry the operation. Replace the diskette.
633	--	--	Diskette overrun.	Press the Reset key and retry the operation.
634	--	--	Unable to write diskette file.	Make sure the correct diskette is in the device.
635	--	--	Diskette not ready.	Press the Reset key and retry the operation.
636	--	--	Diskette file locked (file being used by another operator).	Press the Reset key and retry the operation. Wait until the other operator is finished, then retry the operation.
637	--	--	Diskette file overflow.	Press the Reset key and retry the operation.
638	--	--	Not able to read the diskette file.	
639	--	--	Diskette file not locked.	
640	--	--	Incorrect diskette in the device.	Insert the correct diskette. Press the Reset key and retry the operation.
641	--	--	Mouse parity error/overrun.	Press the Reset key and retry the operation.
642	--	--	Mouse time-out.	
643	--	--	Mouse failure.	
644	--	--	Mouse invalid data.	
645	--	--	Printer error.	
646	--	--	Printer out of paper.	

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
648	--	--	Expansion unit interrupt error.	Press the Reset key and retry the operation.
649	--	--	Expansion unit time-out.	
651	--	--	Permanent RAM parity error.	Power off/on the device. Wait two minutes for testing.
653	--	--	Permanent RAM parity error.	
654	--	--	Control unit to device protocol error.	
656	--	--	Ready time-out error.	Power off/on the device. Wait two minutes for testing.
660	--	--	Microcode error (divide by zero error).	
661	--	--	Microcode error (overflow error).	
662	--	--	Microcode error.	
663	--	--	Microcode error (invalid jump).	
664	--	--	Microcode error (invalid interrupt).	
665	--	--	Microcode error.	
670	--	--	Keyboard error.	
697	--	--	Expedited status queue overflow.	
698	--	--	Asynchronous status queue overflow.	
699	--	--	Undetermined error.	

CHECK ERROR CODES

PROGRAM CHECK ERRORS

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
701	1007	--	Category not supported.	Press the Reset key and retry the operation.
702	1002	--	RU 1.536 bytes received (SNA buffer overrun condition).	
703	1003	OP.CK.	Function not supported. Indicates unsupported session control request, or unsupported data flow control request, or invalid signal request code (not 0001xxxx).	
704	400F	--	Format indicator (FI) bit not allowed.	Press the Reset key and retry the operation.
705	2001	--	Sequence number error.	
706	2002	--	Chaining error.	
707	2003	--	Bracket state error.	
708	2005	--	Data traffic reset state.	
709	2004	--	HDX error.	
711	0805	--	Session limit exceeded.	
712	0813	--	Bracket bid reject.	
713	0815	--	Session already bound.	
714	8005	--	No LU-LU session established.	
715	8009	--	LU not active.	
716	0821	--	Not enough bytes in BIND RU.	
717	0821	--	Invalid support level (bytes 1 – 3).	
718	0821	--	Invalid PLU protocol (byte 4).	
719	0821	--	Invalid SLU protocol (byte 5).	
720	0821	--	Invalid common protocol (bytes 6 – 7).	

CHECK ERROR CODES

Code	Sense Codes		Probable Cause	Corrective Action
	SNA	Non-SNA		
721	0821	--	Less than 64-byte RU length specified (byte 10).	
723	0821	--	Invalid LU type (byte 14).	
724	0821	--	Invalid screen size (bytes 20 – 24).	
725	0821	--	Cryptography not supported (byte 26).	
726	--	--	Negative SNA response.	
727	--	--	SNA exception request received.	
728	0829	--	RM, RMA, or RB command or read partition SF type received with EB and/or CD.	Press the Reset key and retry the operation.
729	0871	OP.CK.	Read partition SF received in retry state.	
750	1003	COM.REJ.	Invalid command received.	
751	0863	OP.CK.	SFE, MF, or SA order with invalid character set value in range X'01' – X'FE'.	
752	1005	OP.CK.	Invalid address received following SBA, RA, or EUA order. MF order addressed to notified attribute location.	
753	1005	OP.CK.	Data follows RM, RMA, or EAU command. GE or RA order received with invalid character. SFE, MF, or SA order with invalid attribute value for highlight or color or character set value of X'FF'.	
754	1005	OP.CK.	Data stream ended before all required bytes for SBA, RA, EUA, SF, SFE, MF, SA, or GE order were received.	
755	1003	OP.CK.	Invalid order received (EBCDIC value less than X'40' not recognized).	

CHECK ERROR CODES

Sense Codes				
Code	SNA	Non-SNA	Probable Cause	Corrective Action
756	1003	OP.CK.	Invalid, structured field type. Structured field type not supported for current configuration.	
757	1003	OP.CK.	Load PS SF with invalid PS alias. Load PS SF load type not supported.	
758	1003	OP.CK.	Set reply mode SF received with invalid mode.	
759	1005	OP.CK.	Read partition SF not last SF. SF type incomplete; length invalid. Set reply mode SF with field/ext field mode and data following SF. Length 0000 but not last SF. Load PS SF length error.	
760	1003	OP.CK.	Erase/reset SF reserved fields not zero. Set reply mode SF attribute type reserved.	Press the Reset key and retry the operation.
761	1005	OP.CK.	Structured field type PID invalid. Query PID is not X'FF'.	
762	1005	OP.CK.	Create partition structured field. Parameter error.	
764	084C	OP.CK.	Load PS SF addressed PS invalid. Load PS SF extension invalid color bits.	
765	1005	OP.CK.	Load PS SF; with invalid load start point; invalid code point of X'FF'; contains too many symbol definitions.	
766	1005	OP.CK.	Load PS SF; with incomplete PS cell data; with invalid end flag for type 2 PS; with invalid type 2 header (end flag encountered and not end of data).	
767	1003	OP.CK.	Create partition structure field; with invalid address mode; with bits 0 – 3 of byte 4, not zero.	

Appendix C

Error Messages



ERROR MESSAGES

If you see the message ...	It means ...
"0 file(s) deleted."	The program failed to find the correct file to delete. Ensure that the correct diskette is in the disk drive.
"Address already mapped."	Two entries have the same LAN address. All LAN addresses must be unique.
"Archive Configuration Conflict."	Non matching update requested, such as SNA update to a non SNA archive. Ensure that the configuration update matches the archive.
"Attempted open of file with wild card file characters."	Do not use wild card characters to open files.
"Attempted rename with wild card names."	Do not use wild card characters with the Rename command.
"Cannot close file Copy #... failed."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot copy file onto itself."	You tried to copy with the same source and destination file names without specifying -t.
"Cannot map different DSNs to the same LAN entity."	Two entries have the same LAN address, including SAP. All LAN addresses must be unique.
"Cannot map DSN to multiple LAN entities."	Two entries have the same DSN address.
"Cannot open file Copy #... failed."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot open foreign language file."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot open keyboard file."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot read configuration file"	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot rename on different drives."	Cannot rename, for example, the "A:" drive to "B:" drive.
"Cannot update file Copy #... failed."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot write file Copy #... failed."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Checksum error."	Something is wrong with the utilities files; you need a new diskette.
"Contact in Progress, Use PF3 to Exit."	This is an X.25 error message.

ERROR MESSAGES

If you see the message ...	It means ...
"Copy aborted."	An error occurred during the copying process. Try operation again.
"Could Not Connect Host Session."	Host status is busy. Retry host connection later.
"Could Not Disconnect Host Session."	Host connection is not active. No user action is required.
"Could Not Establish Connection for Host Session."	No resources are available for host activation.
"Deactivate All DSNs for This Host Before Configuration."	Deactivate the downstream node prior to using the CH command on a remote gateway.
"Descriptor Attribute Error."	This is a host-loaded Printer Authorization Matrix message.
"Descriptor Device Error."	This is a host-loaded Printer Authorization Matrix message.
"Device Not Attached to This Port."	A port number does not have an attached maximum number of supported logical ports. Delete the extra logical port numbers.
"Device Not Authorized to This Pool."	Use the Configure Device Authorization Matrix command to authorize device access to A/A hosts.
"Device type must be 0 or 1."	Valid entries are 0 indicating a PC or 1 indicating a control unit.
"Dial Can Not Be Performed. Enter Next Option Or Use PF3 to Exit."	This is an X.25 error message.
"Dial Set Invalid, Current Dial Set Will Be Used."	This is an X.25 error message.
"Disc Can Not Be Performed. Enter Next Option Or Use PF3 to Exit."	This is an X.25 error message.
"Disconnection Complete, Try DIAL Again."	This is an X.25 error message.
"Disconnection in Process, Try DIAL Again."	This is an X.25 error message.
"Disk error."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Diskette Configuration Conflict."	Nonmatching retrieval requested, such as SNA retrieve to a non-SNA diskette. Ensure that the configuration retrieval request matches the diskette.
"Disk is not ready."	Disk drive door may be open; close door.
"DSN already mapped to another LAN entity."	Two entries have the same DSN address.

ERROR MESSAGES

If you see the message ...	It means ...
"Duplicate file name."	You designated a file with a name already in existence. Change one of the file names.
"Duplicate Value"	A logical port is assigned multiple times. Enter the Configure Logical Units screen and check the logical unit assignments.
"End of directory reached."	An internal software problem occurred. Contact your Customer Support Specialist.
"Error opening configuration file"	Try the operation again. If the message is repeated, you may have a bad diskette.
"Error closing"	Try the operation again. If the message is repeated, you may have a bad diskette.
"Error Pool Not Configured."	A preferred host name has been entered at the Configure Terminal Options screen and this name has not been configured as a host name. Configure the host name using the CH or the CO command.
"Error reading"	Try the operation again. If the message is repeated, you may have a bad diskette.
"Error writing"	Try the operation again. If the message is repeated, you may have a bad diskette.
"Exceeding Number of LUs Configured."	Enter a lower number in the number of LUs parameter in the CH screen, or enter more LUs in the CL screen.
"Exceeds Maximum Number of LUs Supported."	Enter a lower number in the number of LUs parameter in the CH screen. The control unit can only support a specified number of LUs.
"Failed delete."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Failed rename."	Try the operation again. If the message is repeated, you may have a bad diskette.
"File is already open."	An internal software problem occurred. Contact your Customer Support Specialist.
"File is not open."	Ensure that the correct diskette is in the disk drive. If correct diskette is installed and message still appears, contact your Customer Support Specialist.
"File not found."	Ensure that the correct diskette is in the disk drive.
"File pointer does not point to file structure."	An internal software problem occurred. Contact your Customer Support Specialist.

ERROR MESSAGES

If you see the message ...	It means ...
"Format error."	An incorrect parameter or command has been entered. For example, an incorrect value has been entered in a field or an extra character has been entered on the command line.
"Format Error - xxx"	Incorrect data (xxx) are detected in the LCP command field after a valid mnemonic. Reenter the LCP command in the command field. OR No sessions are authorized for selection. OR The password was entered in the command field rather than the password field. Reenter the password in the password field. OR A space was not entered after the E (Echo command mnemonic) in the command field. Type E space and the desired characters you want echoed back on the screen.
"Frame size must be 265, 521, 1033, or 2042 bytes."	Valid entries are 265 for a PC; 265, 521, 1033, or 2042 for a Memorex Telex control unit; 2042 for other control units.
"Hardware Missing."	Ensure the correct feature cards are installed in the control unit. For example, the A/A card may not be installed and you are trying to use this feature.
"Header Error."	This is a host-loaded Printer Authorization Matrix message.
"Host Link Request Active."	The host connection is already active. No user action is required.
"Host Name Already Configured."	You are attempting to assign an IBM host name to an A/A host. This is not supported.
"Host Name Already Configured for ASCII Pool."	This occurs when you are trying to assign an A/A host name to an IBM host. This is not supported
"Illegal command."	You executed a command that does not exist on the menu.
"IML Required."	IML the control unit to reset the configuration parameters.
"Incompatible Message File."	The LCP language file does not match the version on the diskette. Use the correct system diskette.
"Indicate which DSN(s) to activate."	Enter a host DSN address on the command line. On dual host systems, also enter a host designator number.

ERROR MESSAGES

If you see the message ...	It means ...
"Indicate which DSN(s) to deactivate."	Enter a host DSN address on the command line. On dual host systems, also enter a host designator number.
"Insufficient Memory."	The control unit does not have enough memory to support the features of an additional device. This error occurs when too many devices with extended attributes are attached to the control unit.
"Insufficient Memory to Display Response."	No memory is left. You must upgrade your control unit's memory capacity, or free up some of your memory space.
"Invalid ASCII Host Port."	This port cannot be used as a host port.
"Invalid command."	Something is wrong with the .util files; you need a new diskette.
"Invalid Command Option."	An incorrect command was entered in the LCP command field. Reenter the parameter.
"Invalid disk allocation string."	An internal software problem occurred. Contact your Customer Support Specialist.
"Invalid Display ID - dd."	The indicated display ID (dd) is not a decimal number, or is in the range of supported port IDs.
"Invalid Downstream Node Address."	The downstream node LAN address must be a unique 12 hexadecimal digit (6 bytes).
"Invalid file access mode."	You attempted to access a hidden or system file, or a subdirectory.
"Invalid Hardware Configuration."	Ensure the correct feature cards are installed in the control unit.
"Invalid Host ID."	The host designator number must be either 1 or 2. The number 2 is valid only if the control unit is configured for two hosts.
"Invalid LAN Address."	LAN address must be a 12 hexadecimal digit (6 bytes).
"Invalid Language ID."	An invalid language was selected.
"Invalid load file header."	Something is wrong with the .util files; you need a new diskette.

ERROR MESSAGES

If you see the message ...	It means ...
"Invalid Parameter."	An incorrect parameter was entered in a field or on the command line. OR The same LU/host address was assigned to more than one physical unit. Correct this error at the Configure Logical Units screen. OR An incorrect LAN address or SAP has been entered on the command line via the NS command, or an incorrect value has been entered in a field via the NP command. When using the CS command, 00 is not valid as a remote host DSN address.
"Invalid Port ID."	The specified port ID is not a valid decimal number or is not in the range of available port IDs. Reenter the port ID number.
"Invalid Printer Class - cc."	The indicated printer class (cc) is not valid.
"Invalid Printer ID."	Ensure all printer parameters and assignments are entered correctly.
"Invalid Printer Mode - mmm."	The indicated mode (mmm) is not valid.
"Invalid Printer Port."	An invalid port number was entered using the CM command. Enter a different printer port number.
"Invalid SAP."	SAP number must be hex 04, 08, or multiple of 04.
"Invalid SAP-must be a multiple of 04."	SAP number must be hex 04, 08, or multiple of 04.
"Invalid sector number."	An internal software problem occurred. Contact your Customer Support Specialist.
"Invalid System Diskette."	A nonsystem or non-ACS diskette was inserted in the system disk drive. Insert the correct diskette and continue.
"Keyboard File exceeds allocated size."	Try the operation again. If the message is repeated, you may have a bad diskette.
"LCP: I/O Error."	This error message displays when LCP unsuccessfully attempts to read or write a file from/to the system diskette. This occurs when the system diskette is not inserted into the control unit drive, the system diskette is corrupt, or the control unit's disk drive has a problem. If this occurs, first ensure the system diskette is inserted into the control unit drive. Second, try using a new system diskette. Third, if you suspect the disk drive is the problem, contact the system administrator.

ERROR MESSAGES

If you see the message ...	It means ...
"Mapping Incomplete."	Completely fill in the entry line.
"Maximum Number of Host Sessions Already Active."	The maximum host session limit has been reached.
"Missing Diskette Type."	The system, Offline Utilities, or RPQ key diskette designation is missing. Enter the missing diskette type in the appropriate field.
"Must specify SAP."	Type the SAP number (hex 04, 08, or multiple of 04) following the LAN address.
"No ASCII Hosts Available."	A/A hosts have not been assigned to the device. Use the Configure Device Authorization Matrix to assign devices to A/A hosts, or use the Configure Terminal Options to define an A/A host.
"No configuration files found."	The diskette you inserted is not a system diskette.
"No Existing Assignment."	No ports have been authorized through the CO command.
"No Host Address Configured."	Enter the Configure Host screen and enter the host processor address or verify all logical units are assigned correctly.
"No LUs Configured."	Assign LUs using the CL command.
"Non Selectable Field Changed."	The nonchangeable fields or NEX were selected for redesignation. The original PC Environment screen reappears. Do not change a nonchangeable screen.
"Not a diskette drive."	The incorrect diskette drive label has been entered in the Drive field. Enter a usable diskette drive label.
"Not enough arguments."	The DOS command was entered without parameters or one of the parameters contained an error.
"Not enough local memory to execute copy function."	If you think you should have enough memory in the machine, IML the control unit and try the operation again. If the message is repeated, contact your Customer Support Specialist.
"Not enough memory"	There is an internal problem with the control unit. Contact your Customer Support Specialist.
"Number of LUs Less Than Currently Assigned."	The number of LUs currently assigned exceeds the number entered in the number of LUs parameter in the CH screen. If this occurs, enter a larger number of LUs in the number of LUs parameter in the CH screen.
"Pool Not Configured."	Using the CO command, set A/A host parameters.
"Port Not Authorized for ASCII Host Access."	Using the CO command, set up A/A host authorization. Using the CD command, make sure ports are assigned to the A/A hosts.

ERROR MESSAGES

If you see the message ...	It means ...
"Premature end of load file."	Something is wrong with the .util files; you need a new diskette.
"Reset/Clear Error Received, Try Dial Again."	This is an X.25 error message.
"Selected Host is Currently Busy."	The selected A/A host has no available ports.
"Selected Language Already in Use."	The selected language has already been selected. No action is required.
"Selection Already in Session."	At the Host Selection menu, you attempted to select a host session that has already been connected. No user action is required.
"Selection Out of Range."	The selection number is greater than the maximum number of authorized sessions per terminal.
"Session Not Active."	The specified host session has not been connected. If the terminal is authorized to communicate with that host, enter the Host Selection menu and connect to the host.
"Session Not Configured."	The specified host session is not configured for that port.
"Source file not found."	Ensure that the correct diskette is in the disk drive.
"Start address missing."	Something is wrong with the .util files; you need a new diskette.
"Too Many Logical Ports."	The number of logical ports exceeds the maximum number of supported logical ports. Delete the extra logical port numbers.
"Too many open files."	An internal software problem occurred. Contact your Customer Support Specialist.
"-t option invalid on dual disk controller."	Insert diskette into second disk drive.
"Trailer Error."	This is a Printer Authorization Matrix error message.
"Unexecutable Command."	You are trying to use a command that is invalid with the control unit's configuration.
"User Is Not Authorized to Issue This Command."	A privilege-level command was typed at the basic-level LCP menu. Enter privilege-level mode to use a privilege-level command. OR The user is attempting to send an operator generated Alert when the Alert feature is not enabled. Enable the Alert feature.
"Window size must be between 1 and 7."	Recommended entries are 1 for a PC and 2 for a control unit.

ERROR MESSAGES

If you see the message ...	It means ...
"Wrong diskette; cannot continue keyboard selection."	Ensure that the installed Utility diskette has the appropriate release level.



Appendix D

Decimal – Hexadecimal Conversion Table



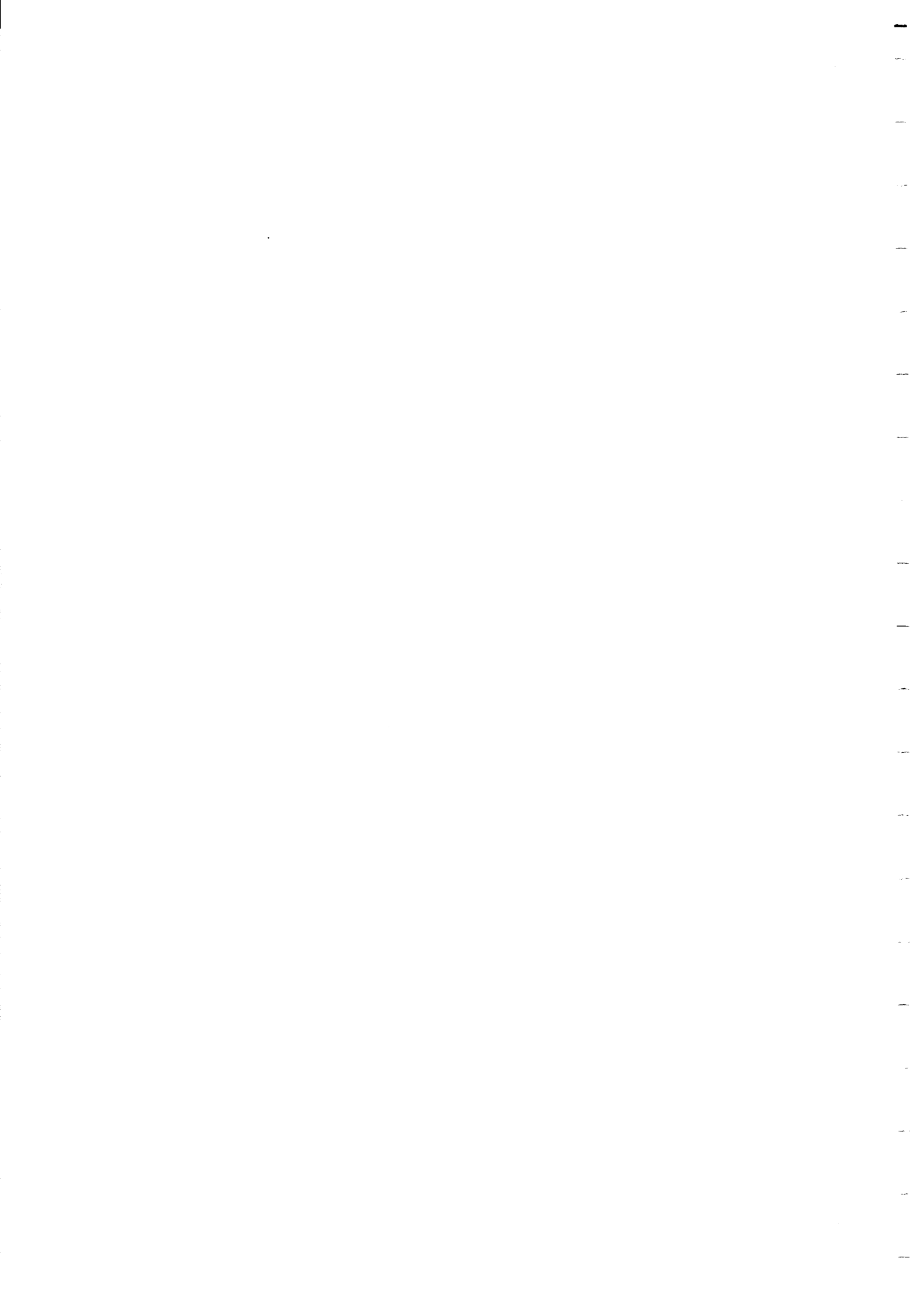
DECIMAL - HEXADECIMAL CONVERSION TABLE

DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX
0	00	44	2C	88	58	132	84	176	B0	220	DC
1	01	45	2D	89	59	133	85	177	B1	221	DD
2	02	46	2E	90	5A	134	86	178	B2	222	DE
3	03	47	2F	91	5B	135	87	179	B3	223	DF
4	04	48	30	92	5C	136	88	180	B4	224	E0
5	05	49	31	93	5D	137	89	181	B5	225	E1
6	06	50	32	94	5E	138	8A	182	B6	226	E2
7	07	51	33	95	5F	139	8B	183	B7	227	E3
8	08	52	34	96	60	140	8C	184	B8	228	E4
9	09	53	35	97	61	141	8D	185	B9	229	E5
10	0A	54	36	98	62	142	8E	186	BA	230	E6
11	0B	55	37	99	63	143	8F	187	BB	231	E7
12	0C	56	38	100	64	144	90	188	BC	232	E8
13	0D	57	39	101	65	145	91	189	BD	233	E9
14	0E	58	3A	102	66	146	92	190	BE	234	EA
15	0F	59	3B	103	67	147	93	191	BF	235	EB
16	10	60	3C	104	68	148	94	192	C0	236	EC
17	11	61	3D	105	69	149	95	193	C1	237	ED
18	12	62	3E	106	6A	150	96	194	C2	238	EE
19	13	63	3F	107	6B	151	97	195	C3	239	EF
20	14	64	40	108	6C	152	98	196	C4	240	F0
21	15	65	41	109	6D	153	99	197	C5	241	F1
22	16	66	42	110	6E	154	9A	198	C6	242	F2
23	17	67	43	111	6F	155	9B	199	C7	243	F3
24	18	68	44	112	70	156	9C	200	C8	244	F4
25	19	69	45	113	71	157	9D	201	C9	245	F5
26	1A	70	46	114	72	158	9E	202	CA	246	F6
27	1B	71	47	115	73	159	9F	203	CB	247	F7
28	1C	72	48	116	74	160	A0	204	CC	248	F8
29	1D	73	49	117	75	161	A1	205	CD	249	F9
30	1E	74	4A	118	76	162	A2	206	CE	250	FA
31	1F	75	4B	119	77	163	A3	207	CF	251	FB
32	20	76	4C	120	78	164	A4	208	D0	252	FC
33	21	77	4D	121	79	165	A5	209	D1	253	FD
34	22	78	4E	122	7A	166	A6	210	D2	254	FE
35	23	79	4F	123	7B	167	A7	211	D3	255	FF
36	24	80	50	124	7C	168	A8	212	D4		
37	25	81	51	125	7D	169	A9	213	D5		
38	26	82	52	126	7E	170	AA	214	D6		
39	27	83	53	127	7F	171	AB	215	D7		
40	28	84	54	128	80	172	AC	216	D8		
41	29	85	55	129	81	173	AD	217	D9		
42	2A	86	56	130	82	174	AE	218	DA		
43	2B	87	57	131	83	175	AF	219	DB		



Appendix E

Language Support



LANGUAGE SUPPORT

SUPPORTED KEYBOARD LANGUAGES

The following languages are supported for the indicated keyboard types. Use the SDU to define the keyboard languages.

Language	87-Key							122-Key			102-Key
	T	DE	APL	Text	C3	C4	A	T	DE	APL	T
Austrian/German	X	X	X		X	X	X				
Austrian/German (Alt)	X	X	X		X	X	X	X		X	X
Austrian/German (C80)	X	X	X		*	X	X	X		X	X
Austrian/German (C81)	X	X	X		*	X	X	X		X	X
Belgian	X	X	X		X	X	X	X		X	X
Belgian Code Pg 500	X	X	X		X	X	X	X		X	X
Brazilian	X	X	X		X	X	X	X		X	X
Canadian Bilingual	X	X	X	X	X	X	X	1		1	X
Canadian French	X	X	X		X	X	X	2		2	X
Canadian French (Alt)	3	X			X	X	X	X		X	X
Danish	X	X	X					X		X	X
Danish (Alt)	X	X	X		X	X	X	X		X	X
EBCDIC (WT)	X	X	X		X	X	X	X		X	X
English (U.K.)	X	X	X		X	X	X	4		4	X
English (U.K.) (C8)	X	X	X		*	X	X	X		X	X
English (U.S.)	X	X	X	X	X	X	X	X		X	X
Finnish	X	X	X		X	X	X	X	X	X	X
Finnish (Alt)	X	X	X		X	X	X	X		X	X
French AZERTY	X	X	X		X	X	X	X		X	X
French AZERTY-105	X	X	X		X	X	X	X		X	X
French QWERTY	X	X	X		X	X	X	X		X	X
International	X	X	X		X	X	X	X		X	X
Italian	X	X	X		X	X	X				X
Japanese English	X	X	X		X	X	X	X	X		X
Japanese Katakana	X	X	X		X	X	X	X	X		X
Norwegian	X	X	X		X	X	X	X		X	X

* = RPQ other than C3

A = Attribute Select

DE = Data Entry

T = Typewriter

X = 1374 Supported

3178 C1 is equivalent to the Data Entry (DE) layout

3178 C2 is equivalent to the Typewriter (T) layout

1 = Supported as Portuguese (Alt)

2 = Supported as Canadian French

3 = Nonstandard keyboard

4 = Supported as English (U.S.)

5 = Requires non-standard character generator

Table E-1. Supported Keyboard Languages

LANGUAGE SUPPORT

Language	87-Key							122-Key			102-Key
	T	DE	APL	Text	C3	C4	A	T	DE	APL	T
Norwegian (Alt)	X	X	X		X	X	X	X		X	X
Portuguese (Alt)	X	X	X		X	X	X	X		X	X
Spanish	X	X	X		X	X	X	X		X	X
Spanish (Alt)	X	X	X		X	X	X	X		X	X
Spanish (New)	X	X	X		X	X	X	X		X	X
Spanish-Speaking	X	X	X		X	X	X	X		X	X
Swedish	X	X	X		X	X	X	X		X	X
Swedish (Alt)	X	X	X		X	X	X	X		X	X
Swiss French	X	X			X	X	X	X		X	X
Swiss French (Ext)	X	X	X		X	X	X	X		X	X
Swiss French (PTT)	5	X	X					X		X	X
Swiss German	X	X	X		X	X	X	X		X	X
Swiss German (Ext)	X	X	X		X	X	X	X		X	X
Swiss German (PTT)	5	X	X					X		X	X

* = RPQ other than C3

A = Attribute Select

DE = Data Entry

T = Typewriter

X = 1374 Supported

3178 C1 is equivalent to the Data Entry (DE) layout

3178 C2 is equivalent to the Typewriter (T) layout

1 = Supported as Portuguese (Alt)

2 = Supported as Canadian French

3 = Nonstandard keyboard

4 = Supported as English (U.S.)

5 = Requires non-standard character generator

Table E-1. Supported Keyboard Languages (Continued)

PHONETIC CHARACTERS

Several supported languages have dead keys. The cursor does not move to the next position after a dead key has been pressed but stays in the same position anticipating an accompanying base character. A dead key produces a diacritical mark. The diacritical mark combined with a base character produces a special phonetic character.

The majority of the base characters are vowels.

The diacritical marks are:

- acute accent (right apostrophe) ´
- cedilla (tail) ¸
- circumflex (caret) ^
- dieresis (umlaut) ¨
- grave accent (left apostrophe) `
- tilde (wave) ~

LANGUAGE SUPPORT

The following table lists the dead keys for supported languages in addition to the valid base characters. If an invalid base character is pressed after a diacritical mark is typed, an error message appears in the operator information area; press Reset to erase the message. Then, reenter the diacritical mark followed by a valid base character.

Language	Diacritics	Base Characters
Belgian Code Pg 500	acute accent É	aeiou AEIOU
	circumflex ^	aeiou AEIOU
	dieresis Ä	aeiou AEIOU
	grave accent `	aeiou AEIOU
	tilde ~	aon AON
Canadian Bilingual	acute accent É	e E
	cedilla Ç	c C
	circumflex ^	aeiou AEIOU
	dieresis Ä	eiou EIU
	grave accent `	aeu AEU
Canadian French	acute accent É	e E
	cedilla Ç	c C
	circumflex ^	aeiou AEIOU
	dieresis Ä	eiou EIU
	grave accent `	aeu AEU
Canadian French Alt	acute accent É	e E
	cedilla Ç	c C
	circumflex ^	aeiou
	dieresis Ä	eiou EIU
	grave accent `	aeu AEU
French (AZERTY-105)	acute accent É	e E
	cedilla Ç	c C
	circumflex ^	aeiou
	dieresis Ä	eiuy
	grave accent `	aeiou AEIOU
Spanish (New)	dieresis Ä	iu IU
	acute accent É	aeo AEO
	dieresis Ä	aeiou
	grave accent `	aeiouy AOU
	circumflex ^	aeiou
Swiss French (EXT)	dieresis Ä	aeiou
	grave accent `	aeiou
	tilde ~	n N
	circumflex ^	aeiou
	dieresis Ä	aeiou
Swiss French (PTT)	grave accent `	aeiou
	acute accent É	aeiou E
	circumflex ^	aeiou
	dieresis Ä	aeiouy AOU
	grave accent `	aeiou
Swiss German (EXT)	tilde ~	n N
	circumflex ^	aeiou
	dieresis Ä	aeiou
	grave accent `	aeiou
	grave accent `	aeiou

The space character is also a valid base character. When the Space bar is pressed after the diacritical mark, the resulting phonetic character is just the diacritical mark.



Appendix F

Customized Keyboards



CUSTOMIZED KEYBOARDS

CUSTOMIZING THE 87-KEY TYPEWRITER STYLE KEYBOARD

Depending on the type of keypad defined, the top row of keys (usually the PF keys) on the 87-key (3X78) typewriter style keyboard and the keypad keys have different numeric and programmable functions. Data entry, APL, and text-style keyboards are not affected.

The four 87-key keypads that can be defined in SDU are: default, C2, C3, C4, and attribute select.

All of the keypad selections, except default, have specific key definitions for the keypad keys and the top row of keys on the main section of the keyboard.

Selecting a default keypad in SDU allows several operators to use the same custom layout and still select a keypad and top row arrangement while online.

WHEN THE DEFAULT KEYPAD IS SELECTED

If the default keypad is selected from the Initialize Keypad menu, the keypad key definitions are variable. Selecting the default keypad in SDU allows you to change the keypad keys, while online, by using the LCP CO command and selecting a Keypad type from the field appearing on the Configure Options menu. The LCP keypad types are: C2, RPQ (C3), and C4. The default keypad (see Figure F-1) will then be mapped to whatever keypad has been selected via the LCP CO command (see Figure F-2).

For example, if you select the default keypad in SDU and select a C4 keypad type from LCP, the keypad arrangement will be mapped like the C4 keypad illustrated in Figure F-2.

Figure F-1 illustrates the keypad keys when the Default keypad option is selected in SDU.

Figure F-2 illustrates the keypad keys for a C2, C3 (RPQ), and C4 87-key Typewriter keypad that you can select via LCP.

CUSTOMIZED KEYBOARDS

Default

K0U K0L K0A	K1U K1L K1A	K2U K2L K2A
K3U K3L K3A	K4U K4L K4A	K5U K5L K5A
K6U K6L K6A	K7U K7L K7A	K8U K8L K8A
K9U K9L K9A	K10U K10L K10A	K11U K11L K11A

The K indicates the function is normally found on the keypad.
 The number indicates which key the function is normally associated with.
 The U (upper), L (lower), and A (alternate) indicate the function is normally found in the shifted, unshifted, and alternate shift positions on the key, respectively.

Figure F-1. SDU Default Keypad Arrangement

C2			C3 (RPQ)			C4		
PF13 PF13 Undefined	PF14 PF14 Undefined	PF15 PF15 Undefined	7 PF1 PF13	8 PF2 PF14	9 PF3 PF15	7 7 PF13	8 8 PF14	9 9 PF15
PF16 PF16 Undefined	PF17 PF17 Undefined	PF18 PF18 Undefined	4 PF4 PF16	5 PF5 PF17	6 PF6 PF18	4 4 PF16	5 5 PF17	6 6 PF18
PF19 PF19 Undefined	PF20 PF20 Undefined	PF21 PF21 Undefined	1 PF7 PF19	2 PF8 PF20	3 PF9 PF21	1 1 PF19	2 2 PF20	3 3 PF21
PF22 PF22 Undefined	PF23 PF23 Undefined	PF24 PF24 Undefined	0 PF10 PF22	. PF11 PF23	→ PF12 PF24	0 0 PF22	. PF23	→ → PF24

Figure F-2. Keypad Options Selected Via LCP

TOP ROW OF KEYS WHEN DEFAULT IS SELECTED

If the default keypad is selected from the Initialize Keypad menu, the *alternate* position of the top row of key definitions (usually the PF keys) on the main section of the keyboard for C2 and C4 keypads is also variable. A C3 keypad has these keys undefined.

CUSTOMIZED KEYBOARDS

Selecting the default keypad in SDU allows you to change the top row of keys, while online, by using the LCP CO command and selecting a Keypad type from the field appearing on the Configure Options menu. The top row of keys (see Figure F-3) will then be mapped to follow whatever keypad has been selected via the LCP CO command (see Figure F-4).

For example, if you select the default keypad in SDU and select a C3 keypad type in LCP, the top row of keys will be undefined. But if a C2 or C4 keypad type is selected in LCP, the top row of keys will be mapped as illustrated in Figure F-4.

Figure F-3 illustrates the top row of keys when the Default keypad option is selected in SDU.

! 1 T1A	@ 2 T2A	# 3 T3A	\$ 4 T4A	% 5 T5A	^ 6 T6A	& 7 T7A	* 8 T8A	(9 T9A) 0 T10A	- = T11A	+ = T12A
---------------	---------------	---------------	----------------	---------------	---------------	---------------	---------------	---------------	----------------	----------------	----------------

This represents U.S. English values.
 The T indicates the function is normally found on the top row of the main section of the keyboard.
 The number indicates which PF key the function is normally associated with.
 The A indicates the function is normally found in the alternate position of the key.

Figure F-3. SDU Default Top Row Key Arrangement

Figure F-4 illustrates the top row of keys if a C2 or C4 keypad is selected via LCP.

! 1 PF1	@ 2 PF2	# 3 PF3	\$ 4 PF4	% 5 PF5	^ 6 PF6	& 7 PF7	* 8 PF8	(9 PF9) 0 PF10	- = PF11	+ = PF12
---------------	---------------	---------------	----------------	---------------	---------------	---------------	---------------	---------------	----------------	----------------	----------------

This represents U.S. English values.

Figure F-4. Top Row Key Arrangement Selected Via LCP



Appendix G

Glossary



GLOSSARY

The following definitions and acronyms apply to the way the terms are used in the 1374 Offline Utility Operations Manual.

- A/A** Asynchronous/ASCII. Asynchronous devices that use the ASCII character set.
- ACS** Asynchronous Communications Support. Memorex Telex's optional ACS enables A/A devices and IBM-compatible PCs running the Memorex Telex 3278 emulation program to access IBM 3270 hosts (3270 emulation mode), and coax terminals to access A/A hosts and A/A timesharing services (A/A emulation mode). Additionally, A/A terminals can access A/A hosts (A/A pass-through mode).
- ADU** ASCII Definition Utility. Memorex Telex's offline utility program lets users: modify existing A/A device profiles on system's default list, assign pre-defined profiles to system's default list, and create and modify profiles.
- alphanumeric** Consisting of letters (A-Z), numbers (0-9), and, symbols (@#%}{+).
- ASCII** American Standard Code for Information Interchange. A 7-bit code used for transmitting data. Decimal numbers 0 through 127 correspond to 128 standard ASCII numbers, letters, and symbols. IBM computers and some asynchronous terminals use an 8-bit ASCII code that incorporates an additional 128 ASCII characters (for a total of 256 characters) to transmit symbols such as boxes, foreign language characters, and mathematical symbols.
- asynchronous** There is not a predictable time interval between successive bits, characters, or events since characters are transmitted one at a time as they are keyed.
- binary** The base two numbering system using the digits 0 (zero) and 1.
- bit** Smallest unit of data, either a 0 (zero) or 1, indicating either a low or high signal. A contraction of the words "binary digit."
- byte** Eight bits of data usually denoting one alphanumeric character.
- channel (local) control unit** A control unit directly attached to a host via bus and tag cables through an Input/Output channel.
- character codes** Codes such as the ASCII and EBCDIC code sets used to define alphanumeric and control characters.
- character string** A sequence of characters treated as a logical group.
- coax devices** Devices operating in a 3270 environment. They are attached to the control unit with coaxial cable that transmit signals at regular, timed intervals.
- control character** The control sequence existing of the ASCII or EBCDIC character.
- control code** The code generated as a result of pressing predefined control keys.
- control key** Any key combination, other than data, which causes a function to occur.

GLOSSARY

control unit, cluster control unit, or controller	A device that coordinates data communication between modems, PCs, plotters, printers, and terminals with one or more attached hosts. Memorex Telex's control unit supervises attached devices through unique software programs. The 1374 models are compatible with IBM 3174 and 3274 control units.
cursor	A symbol, usually a blinking square or underline, indicating the current position on a terminal screen where the next character entered from the keyboard will appear.
CUT	Control Unit Terminal. Terminals and PCs communicate with IBM 3274, 3174, and compatible control units through a communications protocol called Control Unit Terminal mode. In CUT mode, one device connects to one port on the control unit that can access one host session at a time. The control unit interprets the data stream for CUT mode terminals.
data stream	The flow of data from one device to another.
default	Standard parameters.
device	Generic name applied to data processing equipment, for example, a PC, plotter, printer, or terminal.
diskette	A 3.5-inch, flexible plastic magnetic storage medium.
DOS	Disk Operating System. Programs that usually take care of housekeeping functions, such as, formatting and copying diskettes, deleting files, and displaying a list of files.
dumb terminal	A terminal that only transmits or receives data and doesn't contain a Central Processing Unit (CPU). A dumb terminal depends on the host's CPU to process data. Contrast with intelligent or smart terminal.
hexadecimal	Relating to the base 16 numbering system.
IML	Initial Microprogram Load. The reset key on a Memorex Telex control unit.
EBCDIC	Extended Binary Coded Decimal Interchange Code. A standard 8-bit character code set used on IBM devices for transmitting data.
emulation	The imitation of all or part of a device by another device so that it will accept the same data, perform the same functions, and appear as the imitated device.
function keys	Particular keyboard keys whose function varies depending upon the application.
host	A computer that provides application programs, file access, computation, and other data processing services for attached devices.
intelligent (smart) terminal	A terminal with its own CPU to process data. Contrast with dumb terminal.
interface	A common boundary between two interacting devices, systems, or programs.

GLOSSARY

- keypad keys** Auxiliary keys usually located on the right-hand side of the keyboard. Designed for a specific application, typically data entry, since the numbers are arranged in a prescribed manner. Arrows generally used to control cursor movement.
- LCP** Local Control Point. Memorex Telex's program allowing users to configure online the control unit for operation.
- local (channel) control unit** A control unit directly attached to a host via bus and tag cables through an Input/Output channel.
- LU1** A printer that accepts the SNA character string, which contains control codes in addition to 3270 control codes, thus allowing more flexibility in printing data.
- LU3** A printer that accepts only the 3270 data stream.
- PAM** Printer Authorization Matrix. An arrangement of printer ports and assigned devices configured with LCP.
- profile** Foundation of an emulation. The profile contains default definitions for screen commands, keystroke sequences, screen attributes, and output characteristics.
- remote control unit** A control unit that transmits data to the host via a modem using a public telephone line.
- scan code** A code number sent from the keyboard to the control unit indicating what key has been pressed. The control unit converts these scan codes into language codes, controls, and settings for sending data to the host.
- SCS** SNA Character String.
- SDU** System Definition Utility. Memorex Telex's offline utility lets users: select host and keyboard languages, customize EBCDIC and A/A host interface tables, customize standard IBM and A/A emulated keyboard tables, and customize A/A emulation styles.
- sequence** A term describing a series of control characters associated with a specific keyboard key, not a data character key. Generally, a sequence provides a function instead of a data character.
- smart (intelligent) terminal** A terminal with its own CPU to process data. Contrast with dumb terminal.
- SNA** SNA is IBM's layered-designed, private network for sharing data with IBM computers. SNA can be used in both local and remote systems.
- synchronous** There is a predictable time interval between successive bits, characters, or events.
- terminal** Device equipped with a keyboard and a display screen capable of transmitting and receiving data over a communications link.



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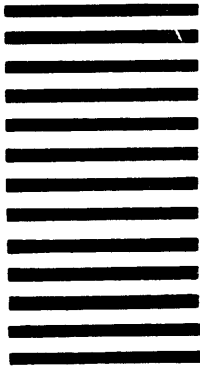
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