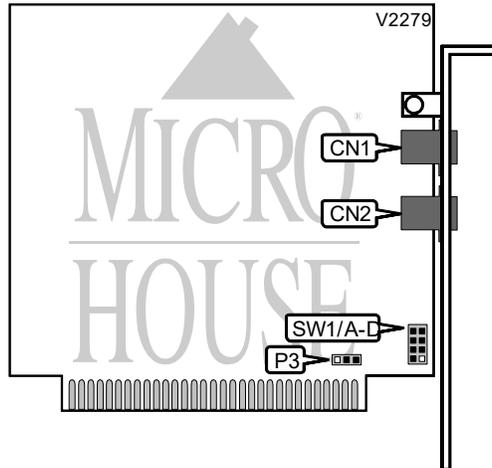


# CARDINAL TECHNOLOGIES, INC.

## 2400V42 (INTERNAL), 2450V42 (INTERNAL)

Card Type	Modem (asynchronous)
Chip Set	Unidentified
Maximum Data Rate	2400bps
Data Bus	8-bit ISA
Data Modulation Protocol	Bell 103/212A
	ITU-T V.21, V.22, V.22bis
Error Correction/Compression	MNP5, V.42, V.42bis



CONNECTIONS			
Function	Label	Function	Label
Line out/in	CN1	Line in/out	CN2

SERIAL PORT ADDRESS					
Setting	IRQ	SW1/A	SW1/B	SW1/C	SW1/D
COM1 (3F8h)	4	Closed	Closed	Closed	Open
COM2 (2F8h)	3	Open	Closed	Open	Closed
COM3 (3E8h)	4	Closed	Open	Closed	Open
COM4 (2E8h)	3	Open	Open	Open	Closed

INTERRUPT SELECTION	
Setting	P3
2	Pins 2 & 3 closed
5	Pins 1 & 2 closed
Disabled IRQ2 & IRQ5	Open

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CARDINAL TECHNOLOGIES, INC.  
 2400V42 (INTERNAL), 2450V42 (INTERNAL)

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SUPPORTED COMMAND SET	
Basic AT Commands	
AT, '+++', 'Comma', A/	
A, B, E, H, L, M, O, Q, S, V, X, Y, Z,	
&C, &D, &F, &G, &L, &P, &S, &T, &W, &Y, &Z	
Extended AT Commands	
\A, \B, \C, \G, \J, \L, \O, \U, \X, \Y, \Z	
S Registers	
S0, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S16, S18, S25, S26, S37	
Special Commands	
"H, "O	
<b>Note:</b> Please see MHI Help file for full command documentation.	

### Proprietary AT Command Set

AUTO-RELIABLE FALLBACK CHARACTER	
Type:	Configuration
Format:	AT [cmds] %An [cmds]
Default:	Unidentified
Range:	0-127
Unit:	ASCII
Description:	Sets the character used as the auto-reliable fallback character
Note:	AT%A0 will disable this function.

BIT MAPPED REGISTERS	
Register	Default
S14	Unidentified
S20	16
S21	Unidentified
S22	Unidentified
S23	Unidentified
S27	Unidentified
S100	Unidentified

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CARDINAL TECHNOLOGIES, INC.  
 2400V42 (INTERNAL), 2450V42 (INTERNAL)

. . . continued from previous page

BREAK TYPE				
Type:	Configuration			
Format:	AT [cmds] \Kn [cmds]			
Description:	Configures action of break signal			
Command	Break from DTE Reliable/Normal mode	Break from DTE Direct mode	Break received from remote modem	Modem receives \B
\K0	Online command mode enabled, send no break to remote modem	Online command mode enabled, send break to remote modem immediately	Buffers cleared, break sent to DTE	Break sent to remote modem and buffers cleared
\K1	Break sent to remote modem and buffers cleared	Send break to remote modem immediately	Buffers cleared, break sent to DTE	Break sent to remote modem and buffers cleared
\K2	Online command mode enabled, send no break to remote modem	Online command mode enabled, send break to remote modem immediately	Break sent immediately to DTE	Send break to remote modem immediately
\K3	Send break to remote modem immediately	Send break to remote modem immediately	Break sent immediately to DTE	Send break to remote modem immediately
\K4	Online command mode enabled, send no break to remote modem	Online command mode enabled, send break to remote modem immediately	Break sent with received data to the DTE	Send break with transmitted data
í \K5	Send break with transmitted data	Send break to remote modem immediately	Break sent with received data to the DTE	Send break with transmitted data

COMPRESSION	
Type:	Configuration
Format:	AT [cmds] %Cn [cmds]
Description:	Selects MNP5 data compression
Command	Function
%C0	MNP5 disabled
í %C1	MNP5 enabled

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CARDINAL TECHNOLOGIES, INC.  
 2400V42 (INTERNAL), 2450V42 (INTERNAL)

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CONNECT MODE	
Type:	Configuration
Format:	AT [cmds] \N <i>n</i> [cmds]
Description:	Controls the type of connection the modem will operate in
Command	Function
\N0	Normal mode enabled
i \N1	Direct mode enabled
\N2	MNP reliable mode enabled
\N3	Auto-reliable mode enabled
\N4	V.42 reliable mode enabled

DIAL	
Type:	Immediate
Format:	AT [cmds] D<#> [cmds]
Description:	Dials telephone number according to any modifiers included in the string
Note:	Any combination of modifiers can be used to produce the desired dial functions in sequence.
Modifier	Function
P	Pulse dialing enabled
R	Answer mode enabled, originate mode disabled following handshake initiation
Sn	Dial stored telephone number <i>n</i>
T	Tone dialing enabled
W	Dialing resumed following dial tone detection
,	Dialing paused for amount of time specified in S8 register
!	Modem commanded to go off-hook for specified time before returning on-hook
@	Wait for quiet answer
;	Modem returned to command state after dialing

DISPLAY CONFIGURATION	
Type:	Immediate
Format:	AT [cmds] \S [cmds]
Description:	Displays current modem settings

EXTENDED RESULT CODES	
Type:	Configuration
Format:	AT [cmds] \V <i>n</i> [cmds]
Description:	Select standard or extended result codes
Command	Function
\V0	Standard result codes enabled
\V1	Extended MNP result codes enabled
\V2	Extended V.42 and MNP result codes enabled

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CARDINAL TECHNOLOGIES, INC.  
 2400V42 (INTERNAL), 2450V42 (INTERNAL)

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FLOW CONTROL TYPE	
Type:	Configuration
Format:	AT [cmds] \Qn [cmds]
Description:	Sets type of flow control used by modem
Command	Function
i \Q0	Flow control disabled
\Q1	XON/XOFF flow control enabled
\Q2	CTS flow control by DCE enabled
\Q3	RTS/CTS flow control enabled

INACTIVITY TIMER	
Type:	Configuration
Format:	AT [cmds] \Tn [cmds]
Default:	0
Range:	0-90
Unit:	1 minute
Description:	Sets the length of time that the modem does not receive information before it disconnects.
Note:	AT\T0 will disable timer.

LINE SPEED	
Type:	Configuration
Format:	AT [cmds] %Nn [cmds]
Description:	Controls maximum DCE line speed
Command	Function
i %N0	Enable maximum DCE speed
%N1	Maximum DCE speed set to 300bps
%N2	Maximum DCE speed set to 300bps
%N3	Maximum DCE speed set to 300bps
%N5	Maximum DCE speed set to 1200bps
%N6	Maximum DCE speed set to 2400bps

REPORT INFORMATION	
Type:	Immediate
Format:	AT [cmds] I n [cmds]
Description:	Displays information requested
Command	Function
I0	Reports modem code
I1	Reports ROM checksum
I2	Tests and reports ROM checksum
I3	Reports version information

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CARDINAL TECHNOLOGIES, INC.  
2400V42 (INTERNAL), 2450V42 (INTERNAL)

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V.42/MNP - DETECTION PHASE	
Type:	Configuration
Format:	AT [cmds] -Jn [cmds]
Description:	Controls V.42/MNP detection
Command	Function
-J0	V.42 detection disabled
í -J1	V.42 detection enabled, then MNP detection
-J2	MNP detection enabled, then LAPM detection

V.42bis - DICTIONARY SIZE	
Type:	Configuration
Format:	AT [cmds] "Nn [cmds]
Default:	Unidentified
Range:	512-1024
Unit:	Strings
Description:	Select V.42 dictionary size