### CARDINAL TECHNOLOGIES, INC. MB14400M

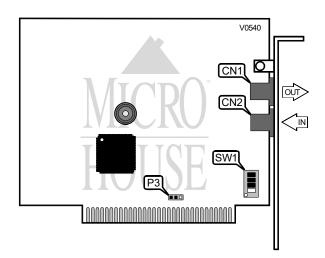
Data (Asynchronous/Synchronous)/Fax

Modem Type Maximum Data Rate 14.4K bps **Maximum Fax Rate** 14.4K bps 8-bit ISA Data Bus **Fax Class** Class II Bell 103 & 212A **Data Modulation Protocols** 

ITU-T V32 & V32 bis & V.22 & V.22bis & V.21

ITU-T V.29 & V.27 GRP III **Fax Modulation Protocol** ITU-T V.42, & V.42bis,MNP 2-5 **Error** 

Correction/Compression



CONNECTIONS			
Purpo: 3	Location	Purpo: 3	Location
Line out	CN1	Line in	CN2

COM PORT & IRQ SETTINGS				
CON	SW1/1	SW1/2	SW1/3	SW1/4
í COM2/IRQ3	Off	On	Off	On
COM1/IRQ4	On	On	On	Off
COM3/IRQ4	On	Off	On	Off
COM4/IRQ3	Off	Off	Off	On

INTERRUF	PT SELECT
Setting	P3
í IRQ Set by SW1 switches	All open
IRQ2	Pins 2 & 3 closed
IRQ5	Pins 1 & 2 closed

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	PROPRIETARY RESULT CODES	
Result co le	Messaç :	Descript in
9	CONNECT 600	Connect at 600bps
12	CONNECT 9600	Connect at 9600bps
13	CONNECT 7200	Connect at 7200bps
15	CONNECT 14,400	Connect at 14,400bps
16	CONNECT 19,200	Connect at 19,200bps
17	CONNECT 38,400	Connect at 38,400bps
19	CONNECT 115,200	Connect at 115,200bps
51	CARRIER 12,200	Carrier at 12,200bps

	i3 - PROPRIETARY PROTOCOLS
1 /pe:	CONFIGURATION
Format:	ATI3
Example:	AT I3 <cr></cr>
Description:	Retrieves the software version data.

	W - PROPRIETARY PROTOCOLS
1 /pe:	
Format:	AT [cmds]
Example:	AT <cr></cr>
Description:	

	W - PROPRIETARY PROTOCOLS
1 ote:	INFORMATIONAL
Command	Protocol
íW0	Protocol negotiation status not reported.
W1	Protocol negotiation status reported.
W2	Protocol negotiation status not reported; response is DCE

	&M - PROPRIETARY PROTOCOLS
1 'pe:	ASYNCHRONOUS MODE
Format:	AT &MO
Example:	AT &MO <cr></cr>
Description:	Set mode to Asynchronous, identical to &Q0.

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	&Q - PROPRIETARY PROTOCOLS		
1 ote:	INFORMATIONAL		
Command	Protocol		
í&Q1	Reserved.		
&Q2	Reserved.		
&Q3	Reserved.		
&Q4	Forces modem to issue OK result code; no changes to operation.		
&Q7	Reserved.		

	&T2 - PROPRIETARY PROTOCOLS
1 /pe:	LOOPBACK TEST
Format:	AT &T2
Example:	AT &T2 <cr></cr>
Description:	Reserved.

	\A - PROPRIETARY PROTOCOLS
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í\A0	Sets MNP block size to 64 char.
\A1	Sets MNP block size to 128 char.
\A2	Sets MNP block size to 192 char.
\A3	Sets MNP block size to 256 char.

	\Bn - PROPRIETARY PROTOCOLS
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í∖Bn	Sends n * 100 ms break to the remote, def 300

	\G - PROPRIETARY PROTOCOLS
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í\G0	Disables XON/XOFF flow control.
	Enables XON/XOFF flow control.
\G1	

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	\K - PROPRIETARY PROTOCOLS
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í\K0	Break from port; sets to Command mode; no break sent to remote modem. Breaks from command mode; Clears buffers, sends break. Breaks from remote; clears buffers; sends break.
\K1	Breaks from port; clears buffers, sends break. Breaks command; clear buffers; sends break. Break from remote; clears buffers passes break on to port.
\K2	Breaks from port; sets to command mode; no break sent.
\k3	Breaks from port; sends break. Breaks command; sends break. breaks remote and passes break on to port.
\K4	Breaks from port; Sets to command mode; no break sent. Breaks command; sends break with sequence of data. Breaks remote; passes break on to port.
\K5	Breaks from port; Sends break with sequence of data. Breaks command; sends break with sequence of data. Breaks from remote; passes break on to port.

	\  - PROPRIETARY PROTOCOLS
↑ ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í\IO	Sets stream MNP mode.
\11	Sets block MNP mode.

	\N - PROPRIETARY PROTOCOLS
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í\N0	Sets mode normal.
\N1	Sets mode direct.
\N2	Sets mode reliable.
\N3	Sets mode auto reliable.

	\O - PROPRIETARY PROTOCOLS
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í/O	Tries to negotiate a reliable connection. Will only be successful if connection exists. Note: has to be last command in the line.

	\Tn - PROPRIETARY PROTOCOLS
↑ ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í∖Tn	Programs inactivity timer; n= 0 to 42, def 0.

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	\U - PROPRIETARY PROTOCOLS
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í\U	12 second wait for request from remote to negotiate link. Will only be successful if connection exists. Note: has to be last command in the line.

	\Y - PROPRIETARY PROTOCOLS
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í\Υ	Transmits link request (originate mode)/ accepts request (answer mode). Will only be successful if connection exists. Note: has to be last command in the line.

	\Z - PROPRIETARY PROTOCOLS
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í\Z	Changes from reliable mode to normal mode & clears buffers.

	%C - PROPRIETARY PROTOCOLS
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í%C0	Disables data compression (MNP)
%C1	Enables data compression (MNP)

%Dn - PROPRIETARY PROTOCOLS	
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í%D2	Sets dictionary size to 2048 (BLTZ.)
%D0	Sets dictionary size to 512 (BLTZ).
%D1	Sets dictionary size to 1024 (BLTZ).
%D3	Sets dictionary size to 4096 single direction 2048 bi-directional (BLTZ).

	%En - PROPRIETARY PROTOCOLS
1 ote:	ERROR CORRECTION & DATA COMPRESSION
Command	Protocol
í%E0	Disable auto retrain.
%E1	Enable auto retrain.

%L - PROPRIETARY PROTOCOLS				
1 ote:	ERROR CORRECTION & DATA COMPRESSION			
Command	Protocol			
í%L	Echoes the received signal (Same strength) range -9dBm to -43dBm.			

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	%Mn - PROPRIETARY PROTOCOLS			
1 ote:	ERROR CORRECTION & DATA COMPRESSION			
Command	Protocol			
í%M0	Disables BLTZ compression mode.			
%M1	Enables BLTZ transmit only compression mode.			
%M2	Enables BLTZ receive only compression mode.			
%M3	Enables BLTZ bi-directional compression mode.			

	%P - PROPRIETARY PROTOCOLS			
1 ote:	ERROR CORRECTION & DATA COMPRESSION			
Command	Protocol			
í%P	Resets BLTZ dictionary (local) and transmits command to reset remote.			

%Q - PROPRIETARY PROTOCOLS				
1 ote:	ERROR CORRECTION & DATA COMPRESSION			
Command	Protocol			
í%Q	Returns the value of the EQM high order byte.			

	%Sn - PROPRIETARY PROTOCOLS				
1 ote:	ERROR CORRECTION & DATA COMPRESSION				
Command	Protocol				
í%Sn	Sets BLTZ max number of characters compressed into single BLTZ word. Range 2 to 250, def 32				

PROPRIETARY COMMAND SET				
1 /pe:	Config	Configuration		
Format:	ATS(register)=(Command Value)			
Example:	ATS36=5			
Description:	Writes to or reads from a specified register.			
Register		Command Value	Function	
S36		3	Negotiation failure - direct connect.	
S36		4	Negotiation failure - normal connect.	
S36		5	MNP attempt - direct connect if failure.	
S36		7	MNP attempt - normal connect if failure.	

PROPRIETARY COMMAND SET			
1 /pe:	Configuration		
Format:	ATS(register)=(Command Value)		
Example:	ATS37=10		
Description:	Writes to or reads from a specified register.		
Register		Command Value	Function
S37		10	Attempt to negotiate line speed 12,200
S37		12	Attempt to negotiate line speed 7200

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PROPRIETARY COMMAND SET			
1 /pe:	Configuration		
Format:	ATS(register)=(Command Value)		
Example:	ATS46=138		
Description:	Writes to or reads from a specified register.		
Register		Command Value	Function
S46		138	Enable error compression & compression.
S46		136	Enable error compression & no compression

PROPRIETARY COMMAND SET				
1 /pe:	Config	Configuration		
Format:	ATS(r	ATS(register)=(Command Value)		
Example:	ATS82=128			
Description:	Writes to or reads from a specified register.			
Register		Command Value	Function	
S82		128	Transmit break in data sequence.	
S82		3	Transmit break immediately; save data integrity.	
S82		7	Transmit break immediately; data integrity lost.	