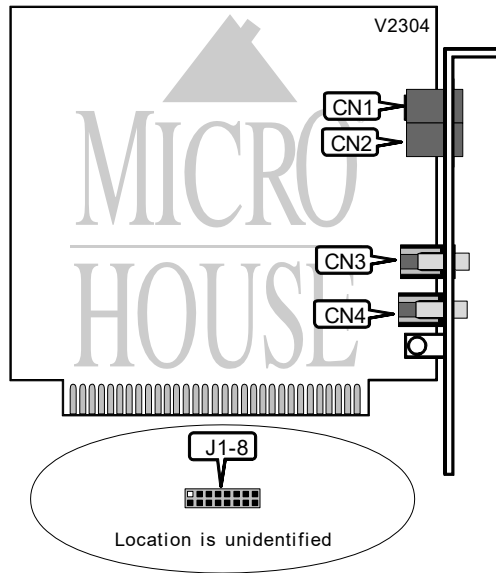


PURETEK INDUSTRIAL CO, INC.

14400BPS FAX/MODEM ADAPTER WITH VOICE

Card Type	Fax, Modem (asynchronous), Voice
Chip Set	Unidentified
I/O Options	Speakerphone, Voicemail
Maximum Data Rate	14.4Kbps
Maximum Fax Rate	14.4Kbps
Data Bus	8-bit ISA
Fax Class	Class II
Data Modulation Protocol	Bell 103/212A
Fax Modulation Protocol	ITU-T V.21, V.22, V.22bis, V.23, V.32, V.32bis
Error Correction/Compression	ITU-T V.17, V.21CH2, V.27ter, V.29
	MNP5, V.42, V.42bis



CONNECTIONS			
Function	Label	Function	Label
Line out	CN1	Microphone connection	CN3
Line in	CN2	Speaker connection	CN4

SERIAL PORT ADDRESS			
Setting	J1	J2	J3
COM1 (3F8h)	Open	Open	Open
COM2 (2F8h)	Closed	Open	Open
COM3 (3E8h)	Open	Closed	Open
COM4 (2E8h)	Closed	Closed	Open
COM5	Open	Open	Closed
COM6	Closed	Open	Closed
COM7	Open	Closed	Closed
COM8	Closed	Closed	Closed

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INTERRUPT SELECTION					
Setting	J4	J5	J6	J7	J8
2	Closed	Open	Open	Open	Open
3	Open	Closed	Open	Open	Open
4	Open	Open	Closed	Open	Open
5	Open	Open	Open	Closed	Open
9	Open	Open	Open	Open	Closed

SUPPORTED COMMAND SET
Basic AT Commands
AT, '+++', 'Comma', A/
A, B, D, E, H, L, M, O, Q, S, V, X, Y, Z
&C, &D, &F, &G, &J, &K, &M, &P, &R, &S, &T, &V, &W, &X, &Y, &Z
Extended AT Commands
\A, \B, \E, \J, \K, \L, \O, \U, \V, \X, %A
S Registers
S0, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S14, S16, S18, S21, S22, S25
S26, S27, S36, S46, S82, S95
Note: Please see MHI Help file for full command documentation.

Proprietary AT Command Set

BIT-MAPPED REGISTER S23		
Format	AT [cmds] S23=n [cmds]	
Default:	28	
Range:	0-191	
Unit:	Bit-mapped	
Description:	Grants/denies remote digital loopback, controls DTE rate and parity, and sets guard tone.	
Bit	Value	Function
0	0	Remote digital loopback denied
	1	Remote digital loopback allowed
3 - 1	000	Sets serial port speed to 0-300bps
	001	Sets serial port speed to 600bps
	010	Sets serial port speed to 1200bps
	011	Sets serial port speed to 2400bps
	100	Sets serial port speed to 4800bps
	101	Sets serial port speed to 9600bps
i	110	Sets serial port speed to 19200bps
	111	Sets serial port speed to 48400bps or upper data rate
5, 4	00	Parity even
	i 01	Space Parity
	10	Parity odd
	11	Mark or No Parity
7, 6	i 00	Guard tone disabled
	01	Guard tone 550Hz enabled
	10	Guard tone 1800Hz enabled

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BIT SAMPLING	
Type:	Configuration
Format:	AT [cmds] #VBS= <i>n</i> [cmds]
Description:	Select bit sampling
Command	Function
#VBS?	Returns current setting of #VBS command
#VBS=2	2 bits per sample ADPCM enabled
#VBS=3	3 bits per sample ADPCM enabled
#VBS=4	4 bits per sample ADPCM enabled

BREAK TYPE	
Type:	Configuration
Format:	AT [cmds] \K <i>n</i> [cmds]
Description:	Configures action of break signal
Command	Function
\K0	Online command mode enabled, send no break to remote modem
\K1	Break sent to remote modem and buffers cleared
\K2	Online command mode enabled, send no break to remote modem
\K3	Send break to remote modem immediately
\K4	Online command mode enabled, send no break to remote modem
í \K5	Send break with transmitted data

COMPRESSION	
Type:	Configuration
Format:	AT [cmds] %C <i>n</i> [cmds]
Description:	Selects data compression
Command	Function
%C0	Data compression disabled
%C1	Data compression enabled

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
\N1	Direct mode enabled
\N2	MNP Reliable mode enabled
\N3	MNP auto-reliable mode enabled
\N4	V.42 reliable mode with phase detection enabled
í \N5	V.42 auto-reliable mode with phase detection enabled
\N6	V.42 reliable mode without phase detection enabled
\N7	V.42 auto-reliable mode without phase detection enabled

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DIAL - STORED NUMBER	
Type:	Immediate
Format:	AT [cmds] DS= <i>n</i> [cmds]
Description:	Dial stored number from memory location <i>n</i> , (<i>n</i> =0-2)

DIAL/BUSY TONE DETECT RANGE		
Type:	Register	
Format:	AT [cmds] S96= <i>n</i> [cmds]	
Description:	Selects the range the modem uses for dial/busy tone detection	
Command	Range	Function
í S96=0	350 - 620Hz	USA, Korea, Taiwan
S96=1	425 - 450Hz	Belgium
S96=2	440 - 700Hz	France
S96=3	350 - 450Hz	Israel, Japan
S96=4	375 - 475Hz	Italy, Norway, Germany, Denmark
S96=5	150 - 450Hz	Netherlands
S96=6	270 - 320Hz	Singapore
S96=7	350 - 500Hz	Sweden
S96=8	375 - 550Hz	Switzerland
S96=9	350 - 440Hz	United Kingdom
S96=10	110 - 700Hz	Full range

ENERGY DETECTION THRESHOLD	
Type:	Register
Format:	AT [cmds] S97= <i>n</i> [cmds]
Default:	45
Range:	Unidentified
Unit:	Unidentified
Description:	Selects dial tone detect threshold during CPM mode

EXTENDED RESULT CODES	
Type:	Configuration
Format:	AT [cmds] W <i>n</i> [cmds]
Description:	Controls extended result codes
Command	Function
í W0	V.42 extended result codes disabled
W1	V.42 extended result codes enabled

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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
\Q0	Flow control disabled
\Q1	XON/XOFF software flow control enabled
\Q2	CTS hardware flow control enabled
i \Q3	RTS/CTS hardware 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.

LINE TYPE	
Type:	Configuration
Format:	AT [cmds] &Ln [cmds]
Description:	Selects line type
Command	Line Type
i &L0	Switched line
&L1	Leased-line - 2-wire
&L2	Leased-line - 4-wire

MODE SELECTION	
Type:	Configuration
Format:	AT [cmds] #CLS=n [cmds]
Description:	Controls the mode the modem will operate in
Command	Function
#CLS?	Returns current setting of #CLS command
#CLS=0	Data mode enabled
#CLS=2	Fax class 2 command mode enabled
#CLS=8	Voice mode enabled

MODEM MANUFACTURER	
Type:	Immediate
Format:	AT [cmds] #MFR? [cmds]
Description:	Reports modem manufacturer

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 14400BPS FAX/MODEM ADAPTER WITH VOICE

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MODEM MODEL	
Type:	Immediate
Format:	AT [cmds] #MDL? [cmds]
Description:	Reports modem models

MODEM REVISION	
Type:	Immediate
Format:	AT [cmds] #REV? [cmds]
Description:	Reports modem revision

REPORT INFORMATION	
Type:	Immediate
Format:	AT [cmds] In [cmds]
Description:	Displays information requested
Command	Function
I0	Reports product-identification code
I1	Reports factory code
I2	Reports internal memory test
I3	Reports firmware version 1
I4	Reports firmware version 2

SIGNAL ROUTING	
Type:	Configuration
Format:	AT [cmds] #VLS= <i>n</i> [cmds]
Description:	Select which signal is routed through the modem
Command	Function
#VLS?	Returns current setting of #VLS command
#VLS=0	Phone line interface routed through the modem
#VLS=1	Handset routed through the modem
#VLS=2	External speaker routed through the modem
#VLS=3	Auxiliary input device routed through the modem
#VLS=4	Internal speaker routed through the modem

SPEED - AUTOBAUD	
Type:	Configuration
Format:	AT [cmds] #BDR= <i>n</i> [cmds]
Description:	Controls speed
Command	Function
#BDR?	Returns current setting of #BDR command
#BDR=0	Autobaud detection enabled
#BDR= <i>n</i>	Returns 'OK' and switches to new speed specified by <i>n</i> *2400bps (<i>n</i> =1,2,4,6,8,16,24)

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TONE GENERATION	
Type:	Configuration
Format:	AT [cmds] #VBT= <i>n</i> [cmds]
Default:	Unidentified
Range:	1-40
Unit:	.1 second
Description:	Controls the amount of time a tone is generated
Command	Function
#VBT?	Returns current setting of #VBT command

VOICE COMPRESSION METHOD	
Type:	Immediate
Format:	AT [cmds] #VCI? [cmds]
Description:	Reports voice compression method used

VOICE INACTIVITY TIMER	
Type:	Register
Format:	AT [cmds] S30= <i>n</i> [cmds]
Default:	0
Range:	0-255
Unit:	1 second
Description:	Maximum duration of DTE and DCE inactivity allowed prior to initiating hang-up process.
Note:	S30=0 disables the timer and allows indefinite inactivity.

VOICE RECEIVE	
Type:	Immediate
Format:	AT [cmds] #VTX [cmds]
Description:	Enables voice receive during voice command mode

VOICE TRANSMIT	
Type:	Immediate
Format:	AT [cmds] #VTX [cmds]
Description:	Enables voice transmission during voice command mode

V.25bis COMMAND SET

CALL REQUESTED NUMBER	
Type:	Immediate
Format:	CRN<#>
Description:	Dials the number given; it will ignore spaces and hyphens in the string.

CALL REQUEST WITH ADDRESS	
Type:	Immediate
Format:	CRS <i>n</i>
Description:	Dials the number stored in NVRAM at location <i>n</i>

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PROGRAM NUMBER	
Type:	Configuration
Format:	PRN <i>n</i> ; <#>
Description:	Stores a phone number in NVRAM at location <i>n</i>

REQUEST LISTED NUMBERS	
Type:	Immediate
Format:	RLN
Description:	Requests the modem to return the list of stored numbers in NVRAM

DISREGARD INCOMING CALL	
Type:	Immediate
Format:	DIC
Description:	Instructs the modem to ignore the incoming call, if the modem is set to automatically answer.

CONNECT INCOMING CALLS	
Type:	Immediate
Format:	CID
Description:	Instructs the modem to answer an incoming call.

V.25bis/AT COMMANDS	
Type:	Immediate
Format:	AT [cmds] ATC [cmds]
Description:	Toggles between V.25bis and AT command set