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US ROBOTICS 14,400/PC, US ROBOTICS 14,400/PC FAX

Card Type	Modem (asynchronous)
Chipset	U.S. Robotics
Maximum Data Rate	14.4Kbps
Maximum Fax Rate	14.4Kbps (fax model only)
Data Modulation	Bell 103A/212A
	ITU-T V.21, V.22, V.22bis, V.23, V.32, V.32bis
Fax Modulation	ITU-T V.17, V.21CH2, V.27ter, V.29 (fax model only)
Error Correction/Compression	MNP5, V.42, V.42bis
Fax Class	Class I (fax model only)
Data Bus	8-bit ISA
Card Size	Full height, one-third length
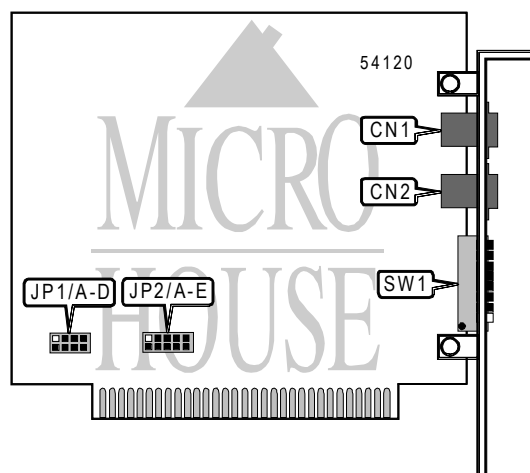
CONNECTIONS			
Function	**Label**	**Function**	**Label**
Telephone line out	CN1	Telephone line in	CN2

USER CONFIGURABLE SETTINGS		
Setting	**Label**	**Position**
ı DTR normal	SW1/1	Off
DTR forced high	SW1/1	On
ı Modem sends verbose result codes	SW1/2	Off
Modem sends numeric result codes	SW1/2	On
ı Result codes enabled	SW1/3	On
Result codes disabled	SW1/3	Off
ı Command mode echo enabled	SW1/4	Off
Command mode echo enabled	SW1/4	On
ı Auto-answer disabled	SW1/5	On
Auto-answer controlled by S0	SW1/5	Off
ı DCD normal	SW1/6	Off
DCD forced high	SW1/6	On

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USER CONFIGURABLE SETTINGS (CON'T)		
Setting	**Label**	**Position**
¡ Load settings from profile specified by Y command	SW1/7	Off
Load settings from factory defaults	SW1/7	On
¡ Command set enabled	SW1/8	On
Command set disabled	SW1/8	Off

SERIAL PORT ADDRESS SELECTION				
Setting	**JP1/A**	**JP1/B**	**JP1/C**	**JP1/D**
3F8h (COM1:)	Closed	Open	Open	Open
2E8h (COM2:)	Open	Closed	Open	Open
3F8h (COM3:)	Open	Open	Closed	Open
2E8h (COM4:)	Open	Open	Open	Closed

INTERRUPT SELECTION					
Setting	**JP2/A**	**JP2/B**	**JP2/C**	**JP2/D**	**JP2/E**
2	Closed	Open	Open	Open	Open
3	Open	Closed	Open	Open	Open
4	Open	Open	Closed	Open	Open
5	Open	Open	Open	Closed	Open
7	Open	Open	Open	Open	Closed

SUPPORTED STANDARD COMMANDS
Basic AT Commands
+++, 'comma', A/
A, B, D, E, H, L, M, O, V, X, Z
&C, &D, &F, &G, &P, &R, &S, &T, &W, &Z
S-Registers
S0, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S18, S25, S38
Note: See MHI help file for complete information.

Proprietary AT Command Set

BIT-MAPPED REGISTER S13		
Format	AT [cmds] S13=*n* [cmds]	
Default:	0	
Range:	0 - 89	
Description:	Controls DTR reset, DTR dialing, reset dialing, and MNP3.	
Bit	**Value**	**Function**
0	í 0	DTR normal.
	1	Reset on low DTR.
2, 1	00	Not used.
3	í 0	DTR dialing disabled.
	1	DTR dialing enabled.
4	í 0	Reset dialing disabled.
	1	Reset dialing enabled.
5	0	Not used.
6	í 0	MNP 3 enabled.
	1	MNP 3 disabled.

BIT-MAPPED REGISTER S15		
Format:	AT [cmds] S15=*n* [cmds]	
Default:	0	
Range:	0 - 56	
Description:	Controls non-error-correcting mode buffer, MNP4, and BS/DEL switch.	
Bit	**Value**	**Function**
2 - 0	000	Not used.
3	í 0	Non-error-correcting mode transmit buffer set to 1.5KB.
	1	Non-error-correcting mode transmit buffer set to 128 bytes.
4	í 0	MNP 4 enabled.
	1	MNP 4 disabled.
5	í 0	Backspace and delete keys normal.
	1	Backspace and delete keys reversed.

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BIT-MAPPED REGISTER S27		
Format:	AT [cmds] S27=*n* [cmds]	
Default:	0	
Range:	0 - 191	
Description:	Controls V.21, V.32 encoding and modulation, V.42 answer tone and handshake, and 9600 result codes.	

Bit	Value	Function
0	¡ 0	V.21 disabled.
	1	V.21 enabled.
1	¡ 0	V.32 trellis coding enabled.
	1	V.32 trellis coding disabled.
2	¡ 0	V.32 modulation enabled.
	1	V.32 modulation disabled.
3	¡ 0	2100Hz answer tone enabled.
	1	2100Hz answer tone disabled.
5, 4	¡ 00	V.42 detect, LAPM and MNP enabled.
	01	V.42 detect and LAPM enabled.
	10	MNP enabled.
	11	LAPM enabled.
6	0	Not used.
7	¡ 0	Actual result codes displayed.
	1	Force 9600 result codes.

BREAK LENGTH	
Type:	Register
Format:	AT [cmds] S21=*n* [cmds]
Default:	10
Range:	0 - 255
Unit:	10 ms
Description:	Sets the length of error control mode breaks sent from DCE to DTE.

BREAK TYPE	
Type:	Configuration
Format:	AT [cmds] &Y*n* [cmds]
Description:	Configures action of break signal.

Command	Function
&Y0	Break empties buffer.
¡ &Y1	Break empties buffer and is sent immediately.
&Y2	Break does not empty buffer and is sent immediately.
&Y3	Break does not empty buffer and is sent in sequence with data.

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COMPRESSION MODE	
Type:	Configuration
Format:	AT [cmds] &K*n* [cmds]
Description:	Selects the type of data compression that will be used.

Command	Function
&K0	Data compression disabled.
i &K1	Auto-detect compression mode.
&K2	Data compression enabled.
&K3	MNP5 data compression only enabled.

CONNECTION SPEED LOWER LIMIT	
Type:	Configuration
Format:	AT [cmds] &U*n* [cmds]
Description:	Sets slowest allowed connection speed if &N is set to 1 or higher.

Command	Function
&U0	No minimum connect speed.
&U1	Set minimum connect speed to 300bps.
&U2	Set minimum connect speed to 1200bps.
&U3	Set minimum connect speed to 2400bps.
&U4	Set minimum connect speed to 4800bps.
&U5	Set minimum connect speed to 7200bps.
&U6	Set minimum connect speed to 9600bps.
&U7	Set minimum connect speed to 12Kbps.
&U8	Set minimum connect speed to 14.4Kbps.

CONNECTION SPEED UPPER LIMIT	
Type:	Configuration
Format:	AT [cmds] &N*n* [cmds]
Description:	Sets required connection speed if &U is set to 0; otherwise, sets fastest allowed connection speed.

Command	Function
&N0	No maximum connect speed.
&N1	Set maximum connect speed to 300bps.
&N2	Set maximum connect speed to 1200bps.
&N3	Set maximum connect speed to 2400bps.
&N4	Set maximum connect speed to 4800bps.
&N5	Set maximum connect speed to 7200bps.
&N6	Set maximum connect speed to 9600bps.
&N7	Set maximum connect speed to 12Kbps.
&N8	Set maximum connect speed to 14.4Kbps.

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DISPLAY INFORMATION	
Type:	Immediate
Format:	AT [cmds] I*n* [cmds]
Description:	Displays modem properties.
Command	**Function**
I0	Displays product identification code.
I1	Tests and displays ROM checksum result.
I2	Tests and displays RAM checksum result.
I4	Displays current command settings.
I5	Displays current NVRAM settings.
I6	Displays current connection's statistics.
I7	Displays product configuration.

ERROR CORRECTION MODE	
Type:	Configuration
Format:	AT [cmds] &M*n* [cmds]
Description:	Selects active error correction protocols.
Command	**Function**
&M0	Normal mode only.
í &M4	Auto-detect mode.
&M5	ARQ mode only.

ESCAPE CHARACTER RESPONSE	
Type:	Register
Format:	AT [cmds] S14=*n* [cmds]
Description:	Controls reaction to escape character.
Command	**Function**
S14=0	Normal operation.
S14=1	When +++ is received, modem disconnects and enters command state.

EXTENDED RESULT CODES	
Type:	Configuration
Format:	AT [cmds] &A*n* [cmds]
Description:	Selects extended result codes.
Command	**Function**
&A0	Extended result codes disabled.
&A1	ARQ result codes enabled.
&A2	V.32 result code enabled.
í &A3	Error control and compression result codes enabled.

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FLOW CONTROL CHARACTER - XOFF	
Type:	Register
Format:	AT [cmds] S23=*n* [cmds]
Default:	19
Range:	0 - 127
Unit:	1 ASCII character
Description:	Sets the character used to represent XOFF.

FLOW CONTROL CHARACTER - XON	
Type:	Register
Format:	AT [cmds] S22=*n* [cmds]
Default:	17
Range:	0 - 127
Unit:	1 ASCII character
Description:	Sets the character used to represent XON.

FLOW CONTROL - MODEM-TO-MODEM	
Type:	Configuration
Format:	AT [cmds] &I*n* [cmds]
Description:	Selects the type of modem-to-modem flow control used.

Command	Function
¡ &I0	Software flow control disabled.
&I1	XON/XOFF pass-through enabled.
&I2	XON/XOFF pass-through disabled.
&I3	Hewlett-Packard ENQ/ACK host mode enabled.
&I4	Hewlett-Packard ENQ/ACK terminal mode enabled.
&I5	XON/XOFF pass-through enabled in normal mode and disabled in error-correcting mode.

FLOW CONTROL TYPE	
Type:	Configuration
Format:	AT [cmds] &H*n* [cmds]
Description:	Sets type of flow control used by modem.

Command	Function
&H0	Flow control disabled.
¡ &H1	CTS/RTS flow control enabled.
&H2	XON/XOFF flow control enabled.
&H3	CTS/RTS and XON/XOFF flow control enabled.

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INACTIVITY TIMER	
Type:	Register
Format:	AT [cmds] S19=*n* [cmds]
Default:	0
Range:	0 - 255
Unit:	1 minute
Description:	Sets the length of time that the modem does not receive information before it disconnects; S19=0 will disable.

LOCK SERIAL PORT	
Type:	Configuration
Format:	AT [cmds] &B*n* [cmds]
Description:	Sets operation of serial port speed.

Command	Function
&B0	Serial speed follows connect speed.
&B1	Serial speed locked.
≀ &B2	Serial speed locked in ARQ mode only.

PROFILE ON POWER-UP	
Type:	Configuration
Format:	AT [cmds] Y*n* [cmds]
Description:	Selects the profile to restore into the active profile on power-up.

Command	Function
≀ Y0	Restore profile 0 on power-up.
Y1	Restore profile 1 on power-up.

RESULT CODES	
Type:	Configuration
Format:	AT [cmds] Q*n* [cmds]
Description:	Enables modem to send result codes to the DTE.

Command	Function
≀ Q0	Result codes enabled.
Q1	Result codes disabled.
Q2	Result codes enabled in originate mode only.

TONE DIALING TEST	
Type:	Register
Format:	AT [cmds] S16=*n* [cmds]
Description:	Begins a tone dialing test.

Command	Function
≀ S16=0	Tone dialing test disabled.
S16=2	Tone dialing test enabled.

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V.32 AND V.32bis MODULATIONS		
Type:	Register	
Format:	AT [cmds] S34=*n* [cmds]	
Default:	6	
Range:	0 - 15	
Description:	Controls V.32 and V.32bis modulations.	
Bit	**Value**	**Function**
0	í 0	V.32bis enabled.
	1	V.32bis disabled.
2, 1	11	Not used.
3	í 0	V.32 modulation disabled.
	1	V.32 modulation enabled.

V.32 HANDSHAKE TIME	
Type:	Register
Format:	AT [cmds] S28=*n* [cmds]
Default:	8
Range:	0 - 255
Unit:	.1 second
Description:	Sets length of V.32 handshake.