

V.3225/V.3225L Manual

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Chapter 3 Option Selection

GENERAL

Note: This chapter contains the options available by pushbutton in response to the LCD. Users of the non-LCD model are encouraged to consult the different sections of this chapter as appropriate for further information on modem operation and option selection.

There are four factory option sets to choose from. The modem is shipped configured to factory option set #1 (see Appendix D). Because of the number of possible applications, most modems require some option changes to fit into the network.

A user programmed option set is available for storing a custom configuration.

STRAP OPTION SELECTION

Modem configuration is determined by front panel controls, AT commands, and hardware option straps located on the pc board. Remove the modem cover for access to the option straps.

Note: Normally pc board straps will not have to be changed.

Removing Cover

Warning: Disconnect AC power before removing the cover. Although dangerous voltage levels are not exposed, disconnecting power ensures an electrical shock hazard is not present.

Place the unit on its side on a flat surface. Insert a medium size flat screwdriver blade in one of the bottom rear latch slots. DO NOT PUSH the screwdriver but lightly pry the handle away from the unit as illustrated in Figure 3-1. This will disengage the lock prong from the lock clip. Assist removal by pushing the cover from the chassis with your fingers on the unit rear edges. Repeat this procedure with the remaining three latch slots.

To replace the cover align the lock clips, rear guide grooves, and front lock tabs. Press the cover in place until the lock clips engage the lock prongs.

Figure 3-2 shows typical strap configurations and Figure 3-3 shows strap locations.

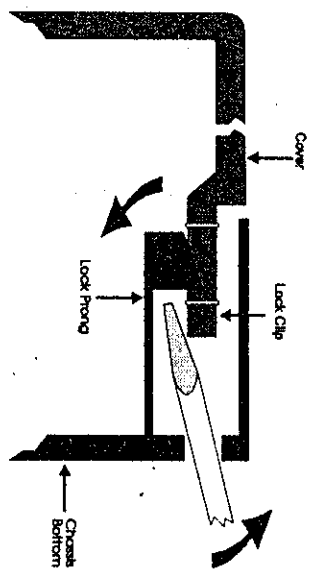


Figure 3-1
Cover Removal

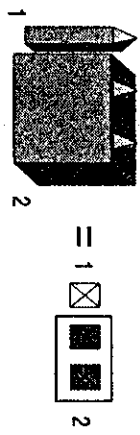


Figure 3-2
Option Strap Configuration

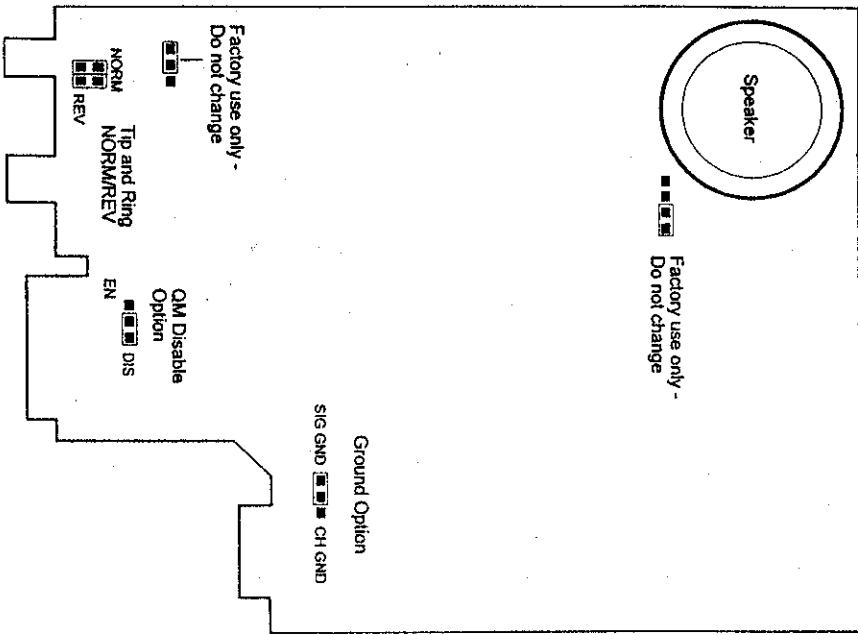
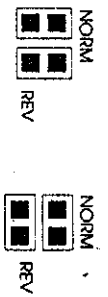


Figure 3-3
Strap Locations

HARDWARE STRAPS

Tip and Ring Polarity

Some telephones are tip and ring polarity sensitive. If a dial tone is detected after dialing, reverse these two straps.



Ground Option

Signal ground is normally connected to chassis ground. If interference exists, isolate signal ground from chassis ground.



*Signal ground connected to chassis ground selected

QM Disable Option

When enabled, the Quality Monitor (QM) output is connected to the EIA-232 (pin 11) interface. Disabled disconnects the QM output. Refer to Chapter 4 and Table 2-1 for more QM information.



*QM output not connected to EIA-232 interface

LCD OPTION SELECTION

The modern options can be observed or changed through the front panel LCD. The LCD also gives modern status.

*factory setting

MAIN MENU

There are six main menus that support modem operations. They are described in this chapter in the same sequence as presented here:

- MODEM STATE
- DIAL STORED NUMBER
- DISPLAY STATUS
- SELECT TEST
- MODIFY CONFIGURATION
- CHANGE PHONE NUMBERS

Each main menu is supported by various submenus, items, and options (Table 3-1). The two right columns in the table show the associated AT commands and S-registers as a cross reference.

Menu Sequence

Main menus consist of six displays which allow access to submenus. Each submenu has a submenu item column; if an option setting is selected or if all options have been scrolled through, the menu will return to the submenu header.

If the NO pushbutton is pressed and held, the modem automatically scrolls through the menu.

Note: Main Menu 1 does not scroll. The displays in Main Menu 1 show the current operating mode or status. These displays are the results of other selected options and are not themselves option selections.

While operating in the option menu, pressing NO scrolls vertically down the columns in Table 3-1 and pressing YES advances horizontally across the columns.

Table 3-1
Menu Options

MAIN MENU		LCD MESSAGES		ITEM OPTION*		AT COM.	S REG
M A I N 1		V.32 9600 IDLE V.32 9600 TALK V.32 9600 TRAINING V.32 9600 ONLINE V.32 9600 RINGING V.32 9600 IN TEST		(Press NO to advance to MAIN 2)			
M A I N 2	MAIN MENU	SUBMENU	SUBMENU ITEM	YES, NO		Dsn (n-1-9)	
M A I N 2	DIAL STORED NUMBER ?		DIAL #1-9				
M A I N 3	DISPLAY STATUS ? (status only)	DTE SIGNALS	DTR ON/OFF DSR ON/OFF OH ON/OFF RI ON/OFF	DISPLAYS STATUS			
M A I N 3		MNP LEVEL	NEGOTIATING MNP LEVEL 2, 3, 4, OR 5 CONNECTION	DISPLAYS STATUS			
M A I N 3		CARRIER DESCRIPTIONS	RECEIVE LEVEL NEAR END ECHO LEVEL FAR END ECHO LEVEL FAR END ECHO DELAY ESTIMATED DELAY FREQUENCY TRANSLATION	DISPLAYS STATUS			
M A I N 4	SELECT TEST?		LOCAL ANALOG LOOP	INITIATE, EXIT			A11 S16
M A I N 4		(4-words only)	LAL WITH TP	INITIATE, EXIT			A18 S16
M A I N 4			REMOTE ANALOG LOOP	INITIATE, EXIT			A12 S16
M A I N 4			RAL WITH TP	INITIATE, EXIT			A19 S16
M A I N 4			LOCAL DIGITAL LOOP	INITIATE, EXIT			A13 S16
M A I N 4			REMOTE DIGITAL LOOP	INITIATE, EXIT			A16 S16
M A I N 4			RDL WITH TP	INITIATE, EXIT			A17 S16
M A I N 4			TEST PATTERN	INITIATE, EXIT			%T --
M A I N 5	MODIFY CONFIGURATION ?	CHANGE MODEM OPTIONS ?	CHANGE DCE RATE	DTE SPEED 9600 TRELLIS 9600 UNCODED 4800 UNCODED 2400 V.22 Dns 1200 V.22 Dns 300 BELL 109	%B %AB6 %AB5 %AB4 %AB3 %AB2 %AB1		S69

Table 3-1
Menu Options, continued

MAIN MENU	SUBMENU	SUBMENU ITEM	ITEM OPTION	AT COM.	S-REG
M A I N 5	CHANGE MODEM OPTIONS ?	FORCED ANSWER OR NORMAL ORIGINATE	NORM ORIGIN FORCED ANSWER	*OR *OR1	S14
		V.22 FAST TRAIN	ENABLE, DIS	*FT1, *FT	S29
		AUTO RETRAIN	ENABLE, DIS	%E1, %E	S80
		TRANSMIT CLOCK	INTERNAL EXTERNAL RECEIVE	&X &X1 &X2	S27
		LINE TYPE	LEASED, DIAL	&L1, &L2, &L	S27
		JACK TYPE	PER - RJ11 PROG - RJ15	%Z %Z1	---
		LINE CURRENT DISCONNECT	OFF, 8 MS 90 MS	*LC, *LC1 *LC2	S32
		LONG SPACE DISCONNECT	ENABLE DISABLE	Y1 Y	S21
		V.22 CLEARDOWN	ENABLE DISABLE	H2 H3	S14
		V.22 GUARD TONE	DIS, 550 1800 HZ	&G, &G1 &G2	S23
		2-WIRE/4-WIRE	2-WIRE, 4-WIRE	&L1, &L2 *DB, *DB1	S22
		DIAL BACKUP	MANUAL, AUTO	---	S28
		LOOKBACK TIMER	OFF, 15, 30, 45, 60 MIN	---	S22
		TRANSMIT LEVEL	0 TO -15 DB	*TLn	S22
		CHANGE MNP OPTIONS? (Asyn Only)	MNP PROTOCOL	ENABLE DISABLE	*M2, *M3 *M, *M1
AUTO FALLBACK/ DISCONNECT (If MNP Proto En)	DISCONNECT FALLBACK TO NON EC MODE		*M2 *M3	S70	
DTE SPEED	DTE = DCE CONSTANT DTE		*V1 V	S72	
MNP FLOW CONTROL	DISABLE XON/XOFF RTS/CTS		*V0 *V1 *V2 *V3	S54	
XON/XOFF PASS THROUGH	ENABLE DISABLE		*X1 X	---	
DATA COMPRESSION	ENABLE DISABLE		%C1 %C	S60	
MNP INACTIVITY TIMER	OFF, 15, 30, 45, 60, 75, 90 MIN		---	S68	
MNP BREAK CONTROL	0, 1, 2, 3, 4, 5		*K, *K1 *K2, *K3 *K4, *K5	S59	

Table 3-1
Menu Options, continued

MAIN MENU	SUBMENU	SUBMENU ITEM	ITEM OPTION	AT COM.	S-REG
M A I N 5	CHANGE DTE OPTIONS ?	OPERATION	SYNC	*M1, *M2, *M3, *M4, *M5 *M	S27
		DTE RATE (Asyn)	ASYNC 18200, 9600, 4800, 2400, 1200, 300	---	S61
		CHAR SIZE (Asyn)	7 BIT 8 BIT	---	S61
		PARITY (Asyn)	NO, EVEN, ODD	---	S61
		AT COMMAND SET	ENABLE DISABLE	*NT1 *NT	S29
		DIAL METHOD (Sync allows DTR control)	ASYNC DTR, MANUAL, V.25 BISTYNC, V.25 SDLC	*M1, *M2 *M3 *M4 *M5	S27 S30
		CHARACTER TYPE (V.25 only)	ASCII, EBCDIC	---	---
		DTR RESPONSE	IGNORE RECALL CMD DISCONNECT RESET	*D0 *D1 *D2 *D3	S21
		DSR STATE	NORMAL FORCED HIGH OFF 3 SECON DISCONNECT FOLLOWS OH	*S1 *S2 *S2 *S3	S21
		DCD STATE	NORMAL FORCED HIGH OFF 3 SECON DISCONNECT FOLLOWS REMOTE RTS	*C1 *C *C2 *C3	S21
		CTS STATE	NORMAL FORCED HIGH CTS FOLLOWS DCD CTS=RTS	*R *R1 *R2 *R3	S21 S72 S72
		RTS/CTS DELAY	0 to 90 ms (10 ms)	---	S26
		DTE COMMANDS FALLBACK	ENABLE DISABLE	*FB1 *FB	S53
		OPTIONS RES/ RETND AT DISC	RESTORED RETND AT DISC	*RO1 *RO	S28
		BILATERAL ANALOG LOOP	ENABLE DISABLE	*AN1 *AN	S34
BILATERAL DIGITAL LOOP	ENABLE DISABLE	*DG1 *DG	S34		
DTE LOCAL TEST	ENABLE DISABLE	*LA1 *LA	S34		

Table 3-1
Menu Options, continued

MAIN MENU	SUBMENU	SUBMENU ITEM	ITEM OPTION	AT COM.	\$-REG	
M A I N 5	CHANGE TEST OPTIONS ? (cont.)	DTE REMOTE TEST	ENABLE DISABLE	*HD1 *RD	S34	
		REMOTE COMMANDED	ENABLE DISABLE	*14 *15	S23	
		TEST TIMEOUT	OFF: 60, 120, 180, 240 SEC	---	S18	
		CHANGE DIAL OPTIONS ?	DIAL TYPE	PULSE, TONE	P, T	S14
		AUTODIAL #	OFF, 1-9	*AUN (n=1-9)	---	
		DIAL TONE	BLIND DIAL WAIT FOR DIAL TONE	X, X1, X3 X2, X4	S22	
		WAIT DELAY (Blind Dial)	1, 2, 3, 4, 8, 16 32 SEC	---	S6	
		PAUSE DELAY	1, 2, 3, 4, 8, 16 32 SEC	---	S8	
		CALL TIMEOUT	15, 30, 45, 60, 75, 90, 105, 120 SEC	---	---	
		ANSWER RING #X	MANUAL, 1, 2, 4, 8, 16	---	S0	
CHANGE SPEAKER OPERATION ?	801 V.32 TIMEOUT	LONG, SHORT	---	S53		
	AUTOCALLBACK	ENABLE DISABLE	---	S72		
	VOLUME CONTROL	LOW MEDIUM HIGH	L1 L2 L3	S22		
LOAD/STORE OPTION SET ?	SPEAKER CONTROL	ON UNTIL CARR DETECT ALWAYS ON OFF WHILE DIALING ALWAYS OFF	M1 M2 M3 M	S22		
	LOAD FACTORY OPTION	NO, 1, 2, 3, 4, RESET SECURITY?	&Fn (n=1-9)	---		
	STORE PRESENT OPTIONS	YES, NO	&W	---		
CHANGE PHONE NUMBERS ?	PHONE NUMBER	NO/ NINE 31-CHAR NUMBERS	&Zn (n=phone # and dial modifiers) *CHN, X	---		

OPTION SELECTION

Options are selected by pressing the YES/ NO push-buttons. When powered up the modem will go to the selected display under the Main Menu 1 header in Table 3-1. Any time a Main Menu is displayed, pressing NO scrolls through the Main Menus. When the end is reached, the display returns to main #2.

Note: Certain options are dependent on or are restricted by the mode of operation. For example, dial backup is not available in V.22 mode.

NO DIAL STORED NUMBER NO DISPLAY STATUS? NO... CHANGE PHONE #?

Main Menu
When any Main Menu is on display, pressing YES advances to the first Submenu in that Main Menu group.

CHANGE MODEM CONFIGURATION? YES CHANGE MODEM CONFIGURATION?

Submenu
When in a Submenu column, pressing NO will scroll down the Submenu and when the end is reached will return to the Main Menu header for that Submenu group.

CHANGE MODEM OPTIONS? NO... LOAD/STORE OPTION SET? NO MODIFY CONFIGURATION?

When in a Submenu column, pressing YES advances to the Submenu Item column.

CHANGE MODEM OPTIONS? YES DCE RATE

Option Selection

Submenu Item

When in a Submenu Item column, pressing NO will scroll through the items and when the end is reached will return to the Submenu header for that item group.

DCE RATE NO

ORIG/FORCE ANSWER? NO...

V.22 GUARD TONE DISABLED? NO

CHANGE MODEM OPTIONS? NO

**This is the last submenu item for modem options.*

When in a Submenu Items column, pressing YES advances to the Option Setting for that Submenu Item. The first option that appears is the currently selected option.

NORMAL ORIG. FORCED ANSWER? YES

FORCE ANSWER NORMAL ORIG.? YES

Item Option

When in the Item Option column, respond to the prompt question on the LCD to either keep or change the current display.

USE RECEIVE TRANSMIT CLOCK? NO

USE EXTERNAL TRANSMIT CLOCK? NO

USE INTERNAL TRANSMIT CLOCK? YES

INTERNAL CLOCK CHANGER? YES

Selecting the Option

Select the submenu containing the option (submenu item) to be changed and press YES. The LCD displays the first submenu item.

If the first submenu item (option) setting displayed is the desired option, press NO to scroll through Submenu Items. If the first setting displayed is not the desired setting, respond to the prompts until the desired setting is displayed, then advance to the next submenu item. In any case, responding to the prompt will guide you to the desired option.

Note: Because of menu structure and options available, not all Main Menus have Submenus and not all Submenus have Item Options. However, the option selection sequence is the same.