

Front Panel

*This chapter describes the displays and buttons on your **Prima LT Plus***

3 The **Prima LT Plus** Keypad and Display

An internal keypad beeper, which gives a short beep each time a key is pressed, gives positive feedback for each button press. This feature is user controllable, and can be switched off when the **Prima LT Plus** is used in environments where noise cannot be tolerated. In addition, the display contrast can be adjusted over a wide range to allow for easy viewing from any angle.

3.1 Character Display

The 2 lines by 16 character LCD display for the **Prima LT Plus** serves two functions, *setup* and *system status*. The *setup* display is used for menu navigation and for selecting responses to front panel user prompts. Although only 16 characters wide, the dual-purpose display can be used to show all menu commands and is scrolled using the cursor keys. An example of the display is shown here:

```
PRIMA LT+  1.xx
[algorithm] loop
```

The top line of the display is for information such as current menu branch, encoder and decoder status, prompts and error messages. The bottom line is for menu navigation and other information. When at the top of the menu tree, this line will show the software version of the **Prima LT Plus**.

Encoder and decoder status displays can be shown at any time by pressing the **E STAT** or **D STAT** buttons. An example of the encoder status display is shown here:

ENC MPEGL2 48KHz 00:00 LB 128K JS

The display shows the encoder configuration including algorithm, bit and sample rate and connect time (if connected) or loopback state, and is interpreted as follows. The top line shows the following information:

Field	Description	Range
1	ENC - This indicates that the Encoder status display is shown	ENC
2	Algorithm	MPEGL2, MPEGL3, G.722, CCSO or CCSN
3	Sample rate	16, 24, 32 or 48 kHz

The bottom line shows additional encoder information:

Field	Description	Range
1	Connect time	MM:SS or HH:MM format, as appropriate, colon will flash when connected.
2	Loopback state	LB = loopback ON, blank = loopback OFF
3	Bit Rate	Selected encoder bit rate, in kb/s
4	Algorithm mode	M = Mono, DM = Dual Mono, FS = Full Stereo, JS = Joint Stereo

An example of the decoder status display is shown here:

DEC MPEGL2 48KHz 00:00 IND 128 JS

The display shows the decoder configuration including algorithm, bit and sample rate and connect time (if connected) and independent mode, and is interpreted as follows. The top line shows the following information:

Field	Description	Range
1	DEC - This indicates that the Encoder status display is shown	DEC
2	Algorithm	MPEGL2, MPEGL3, G.722, CCSO or CCSN
3	Sample rate	16, 24, 32 or 48 kHz

The bottom line shows additional encoder information:

Field	Description	Range
1	Connect time	MM:SS or HH:MM format, as appropriate, colon will flash when connected.
2	Independent mode	IND = decoder independent, blank = decoder not independent
3	Bit Rate	Selected decoder bit rate, in kb/s
4	Algorithm mode	M = Mono, DM = Dual Mono, FS = Full Stereo, JS = Joint Stereo

3.2 Front Panel Controls

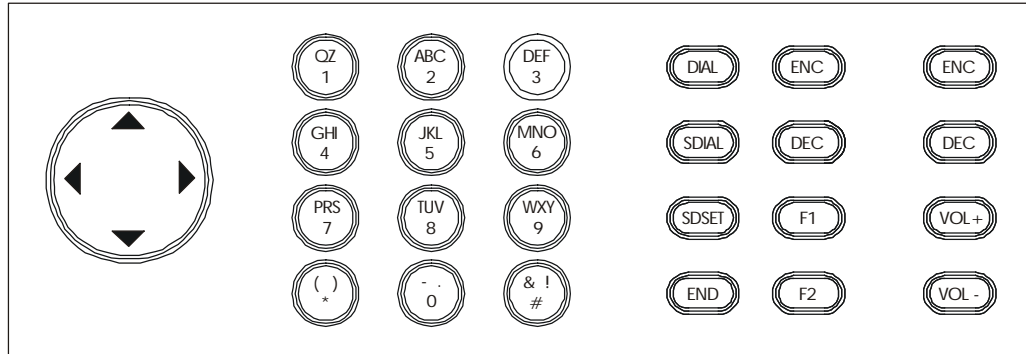


Figure 3-1 **Prima LT** keypad

3.2.1 Cursor Keys

The circular thumb-key used to control cursor motion. The four possible movements of this key are:

- UP ARROW**
- LEFT ARROW**
- RIGHT ARROW**
- ENTER (down arrow)**

The up arrow key is used to move up the menu tree. This key is also used on power-up to force entry into the ROM boot mode.

The left and right arrow keys are used to move to the left and right in the menu tree.

The **ENTER** (down arrow) key is used to bring you down to the next menu level or execute the menu tree entry enclosed within the square brackets ([]).

3.2.2 Alphanumeric Keypad

The alphanumeric keypad is used to enter all information required for the execution of commands, as well as for dialing. Besides digits 0-9, the entire 26-letter alphabet and limited punctuation is represented by only 12 keys. By repeatedly pressing a key, different characters are displayed, and that character is locked in when the cursor keys are used to scroll to the next character. Once the character string has been entered, the **ENTER** key enters or executes the string or dials the number.

Different commands or function modes enable different characters on these keys. For example, dialing commands enable only the numeric selections for these keys. When Prima Logic Language commands are entered all key characters are enabled. By depressing the 2 key repeatedly, the A, B and C characters are displayed. When such multi-character modes are enabled, the left and right arrow keys are used to move to the left and right on the current line. The **ENTER** key is used to accept the entire entry.

3.2.3 Dial Setup Keys

The four keys below the **DIAL** label are used for Quick Configurations and for dialing when using an internal terminal adapter. They are:

DIAL
SDIAL
SDSET
HANGUP

The **DIAL** key allows direct manual dialing of one or more of the ISDN 'B' channels when internal terminal adapters are used. Before dialing can be attempted for the first time, or after a factory default reset, the terminal adapter Digital Interface (DIF) must be defined by using the **CIF** remote control command or from the keypad (see Chapter 5). The DIF must be a Terminal Adapter (TA) type of Digital Interface Module (DIM) such as a TA301. You cannot use the **Prima LT Plus** dial keypad to dial through an external terminal adapter.

Pressing the **DIAL** key starts the dialing sequence. The LCD display will prompt the user for the line ('B' channel) to dial and the telephone number(s). The last numbers dialed on all lines are saved as long as power is maintained. To dial a different number, simply overwrite the previous number. Once the **ENTER** key is pressed confirming the entry of the phone number, the dialing operation begins. The LCD display will indicate that the **Prima LT Plus** is dialing and the


LED associated with the ISDN 'B' channel will flash. When connected, the LCD display will indicate the line connects and the LED will illuminate when the connection is established.

The **SDIAL** key is used to Speed Dial a destination or to load a Quick-Configuration. After depressing **SDIAL**, the LCD screen prompts for the 1, 2, or 3 digit speed dial number, representing which of the 256 possible Speed Dial entries to load. Pressing the **ENTER** key causes the **Prima LT Plus** to configure and/or dial. See the **CSD** command in the **CDQPrima Remote Control Manual**, available from MUSICAM USA or on-line at www.musicamusa.com, for details on the required parameters.

The **SDSET** key is used to set up a Speed Dial entry and maintain the Speed Dial directory. Pressing this key brings up a sub-menu with commands that allow you to save, recall, view, edit and delete existing entries, and to add new entries. Selecting <Add entry> produces a series of prompts on the LCD display to enter the speed dial parameters. The parameters to be entered are described in later chapters of this document, and include bit rate, sample rate, algorithm, mode, etc.

The **HANGUP** key is used to terminate a connection made using the **DIAL** or **SDIAL** keys. Pressing this key allows any or all lines to be dropped. See the **CHU** command in the **CDQPrima Remote Control Manual**.

3.2.4 Status And Function Keys

The **ESTAT** and **DSTAT** buttons display the encoder and decoder status. All important parameters are shown, including bit rate, sample rate, algorithm and algorithm mode, loopback state and connect time. Pressing the up arrow key  returns the display to the normal menu mode.

The two function keys, **F1** and **F2**, can be programmed to execute any Prima Logic Language or remote control command. For example, you can program a function key for one button speed dialing. If these keys have not been programmed, pressing one will bring you directly to the function key programming menu.

3.2.5 Headphone Control Keys and Intelligent Headphone Functions

The four keys under the HP label are used to control the output of the front panel headphone jack. These keys are:

VOL+

VOL- ENC DEC

The keys labeled **ENC** and **DEC** are used to select the encoder and decoder respectively. If the **ENC** button is pressed, the input signal to the encoder section is output to the headphone jack. If the **DEC** button is pressed, the decoder output is output to the headphone jack. There are four HP Status LEDs that indicate what headphone output is active. If the **ENC** button is pressed, one or both of the encoder headphone LEDs illuminate. When the **ENC** button is first pressed, the output of the left and right channels are output to the left and right earphones and both encoder headphone LEDs are illuminated. If the **ENC** button is pressed a second time, the encoder left channel LED is illuminated and the input to the encoder left channel is output to both the left and right channel headphones. If the **ENC** button is pressed again, the right channel HP LED is illuminated and the signal that is input to the right channel of the encoder is connected to both the left and the right channel of the headphones. A similar action occurs when the **DEC** button is repeatedly pressed. The **Prima LT Plus** remembers its settings so that Encode/Decode comparison can be easily accomplished

The **VOL+** and **VOL-** buttons control the volume of the headphone output. Pressing the **VOL+** increases the headphone volume, and pressing the **VOL-** decreases the headphone volume. The headphone volume level ranges from 0 (mute) to 127 in arbitrary volume units (approximately 1-dB steps).

The volume buttons control the left and right channels simultaneously but the encoder and decoder output signals have separate volume levels that are active when the **ENC** and the **DEC** buttons are pressed. There is no left-right balance control.



If the headphone volume is set too high, distortion may occur. We recommend using efficient headphones.

Also note that the encoder headphone signal is taken at the output of the A/D converter, so if a low sample rate is selected, a lower fidelity signal will be heard through the headphones.

3.3 Front Panel Status Indicators

There are two groups of status LEDs on the front panel of the **Prima LT Plus**. The six amber LEDs under the VU meters indicate the connection

status of the six available lines. Dark indicates not connected, flashing indicates dialing, and ON indicates that the line is connected. Please note that with certain external terminal adapters or CSU/DSUs, these LEDs may be lit continuously.

The second group of status LEDs, over the headphone jack, indicates if the **Prima LT Plus** is framed (green) or if there are bit errors on the line (red). The four headphone status LEDs indicate which headphone output is active: send or receive, mono or stereo. Both left and right LEDs will be illuminated if the output is stereo, only left or right will be illuminated if the output is mono.