

GENERAL DESCRIPTION

This device will fully support the emulation of a bilingual (English and American Spanish) **NX-148E** or **NX-1192E** LCD keypad over a serial link to a host computer or automation with the exception functions unique to the LCD and sounder.

PROGRAMMING

Please refer to the NX-148E keypad instruction manuals for all normal and programming operations including Master and Temporary Partition modes. The functions not supported are *⓪ (Set Tone Pitch), *⓪① (Set Backlight Level and LCD Contrast) and *⓪④ (Set Keypad Number and Partition). This unit uses a fixed address of 248 and normally operates in Partition 1.

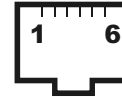
WIRING

The serial port is configured to communicate at 9600 baud, 8 data bits, 1 stop bit and no parity. There is no hardware or software flow control; therefore the handshake lines should be ignored.

The NX buss should be connected to the pins using the proper connector as follows:

2 = NX COM 3 = NX POS 4 = NX DATA

Pins 1,5 and 6 should not be connected.



RJ-11 Connector as viewed from back of the NX-587E module.

CHARACTER DEFINITION

- The **characters** used to emulate the keys found on a real LCD keypad are ASCII 1-9, *, and #.
- The **function** keys are emulated as the following:

S = STAY	C = CHIME	E = EXIT	B = BYPASS	K = CANCEL
F = FIRE	M = MEDICAL	H = HOLDUP (Panic)	U = Up Arrow	D = Down Arrow
- Other** characters are used to turn on and off a variety of messages and events that can be sent from this module. The upper case letter toggles the feature ON while the lower case letter toggles the feature OFF as follows:

TIP: These flags are not stored if power is lost. You may refresh them periodically to maintain.

T = Turn on	t = turn off	.....	LCD <u>text</u> strings ("Text Enabled" LED is illuminated on NX-587E when text is enabled)
A = Turn on	a = turn off	.....	Adding text <u>attributes</u> to strings (above) (e.g. flashing or normal)
L = Turn on	l = turn off	.....	<u>LED</u> and buzzer condition messages
I = Turn on	i = turn off	.....	<u>Individual</u> LED annunciation (Refer to Message Configurations, section 3 below)
P = Turn on	p = turn off	.....	<u>Partition</u> status information (transitions only)
Z = Turn on	z = turn off	.....	<u>Zone</u> status information (transitions only)
N = Turn on	n = turn off	.....	Adding zone <u>name</u> to zone status (above)
Qxxx		.....	<u>Query</u> (or poll) for a previously enabled message

- The NX-587E will transmit a **Line Feed (0Ah) character** at the beginning of the string, and a **Carriage Return (0Dh) character** at the end. The characters within the message will use normal printable ASCII (English) characters with the exception of the following values, which should be translated into the appropriate printable character as shown below:

00h = á	01h = é	02h = í	03h = ó	04h = ú	05h = ñ
06h = Ñ	1Fh = ■	5Ch = ‡	7Eh = →	7Fh = ←	

MESSAGE CONFIGURATIONS

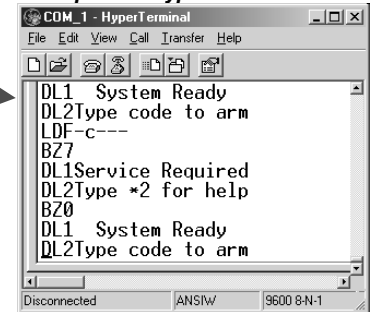
(Excluding the Line Feed at the beginning and Carriage Return at the end)

SECTION 1 - LCD Text strings – The LCD display will be identified by "DL1" and "DL2". DL1 indicates the top line and DL2 indicates the bottom line of the display, followed by 16 ASCII (or previously defined) characters that would be displayed on an LCD keypad.

SECTION 2 - LCD Text strings with Attributes turned on – The LCD display will be identified by "DL1" and "DL2". DL1 indicates the top line and DL2 indicates the bottom line of the display, followed by 16 2-character ASCII (or previously defined) pairs that would be displayed on an LCD keypad. If a hyphen (-) follows a character, it would not be flashing. If an underscore (_) follows, the character would be flashing.

```
DL1S-y-s-t-e-m- -N-o-t- -R-e-a-d-y-
DL2F-o-r- -h-e-l-p-, -p_r_e_s_s_→
```

Examples of HyperTerminal Screen:



- Status LED message** – The Status LED message will be sent when the state of any of the displayed LED's change. The message will consist of "LDS", followed by 4 characters that represent the **A**(rmed), **R**(eady), **F**(ire), and **P**(ower) LED's. If the character position contains a hyphen (-), the corresponding LED is off. If the character is in lower case, the LED is on and if the character is in upper case, the LED is flashing.

Example (ARMED=Flashing, READY=On, FIRE=Off, POWER=On)

```
LDSAr-p
```

