ESSEX ELECTRONICS INCORPORATED

1-800-KEYLESS   keyless.com

RII 67 ☐
SERIAL ASCII SPECIFICATIONS

**12 Pad
3x4**

**Thinline
2x6**

Part Number (s): KTP-983-SN, KTP-983-BN, KTP-983-KN
KTP-982-SN, KTP-982-LI, KTP-982-BN, KTP-982-LR
Output: Standard Serial ASCII Format
Voltage(s):   5 VDC, +/- 0.1V 20mA   12 VDC, +/- 3.0V 20mA
Temperature: -40 C to +70 C (-40 F to +160 F)
Default Baud/Parity: 9600 Baud, No Parity

These Keypads are selectable for 5 or 12 Volts. There are two pins directly above the connector on the back of the keypad, A jumper plug is installed on one of the pins. This is the default setting for 12 Volt operation. If you require 5 Volt operation, install the jumper plug on both pins.
Normal Serial and Inverted Serial signals are open collector outputs with 2.2K pull-ups to the internal +5v. An annunciator beeps with each key press. When the LED control input is pulled low, the GREEN LED will be on and the RED LED will be off. When the input goes high the RED LED is on and the GREEN LED is off. The RED LED will blink with every key press. The LED control input is pulled to the internal +5v with a 2.2K resistor. An output is generated with each key press which can be used to drive a CCTV or Security Light. Available through the Blue wire (see Connector Wiring), this is an open collector output capable of sinking 1/4 A with a 30 second on time.

The Essex Generic Serial Keypad outputs Standard ASCII Single Digit Hex Data as follows:

0 - 0x30	6 - 0x36
1 - 0x31	7 - 0x37
2 - 0x32	8 - 0x38
3 - 0x33	9 - 0x39
4 - 0x34	* - 0x2A
5 - 0x35	# - 0x23

CONNECTOR WIRING

VOLTAGE SELECT (Do NOT apply voltage)
12V - Jumper on 1 pin only
5V - Jumper on both pins

PINK (1) - Baud/Parity PGM (Do NOT apply voltage)

TAN (3) - Case

BLUE (2) - CCTV

BROWN - LED Control (Do NOT apply voltage)

BLACK - Ground

ORANGE - Not Used (Do NOT apply voltage)

RED - Input Voltage

WHITE (a) - Inverted Serial Output

GREEN (b) - Normal Serial Output

Wiring
Red - Input Voltage
Black - Ground
Green (b) - Normal Serial
White (a) - Inverted Serial (goes to pin 2 of DB-9 (232RX))
Brown - LED Control
Pink (1) - Baud/Parity PGM
Blue (2) - CCTV
Orange - Not Used
Tan (3) - Case Ground

(1) PINK - The Keypad baud rate and parity can be modified in the field. The PINK wire is used for this procedure. With NO voltage applied to the Keypad, connect the PINK wire to the BLACK wire on the wiring harness. Apply the appropriate voltage to the RED and BLACK wires. You will hear 4 rapid audible beeps and both the RED and GREEN LED's will flash at the same rate. Enter the desired first digit on the Keypad to select the baud rate:

1 = 300	5 = 4800
2 = 600	6 = 9600
3 = 1200	7 = 19200
4 = 2400	

     (Note: All baud rates have a timing error of < 0.2% + Xtal Freq Error)
You should hear 2 audible beeps and the RED LED will continue blinking while the GREEN LED will be ON solid. Next enter the desired second digit on the Keypad to select the parity option:
     0 = None (8 Data Bits)
     1 = Odd (7 Data Bits + Odd Parity Bit)
     2 = Even (7 Data Bits + Even Parity Bit)
     (All Parity formats have a single Start and Stop Bit)
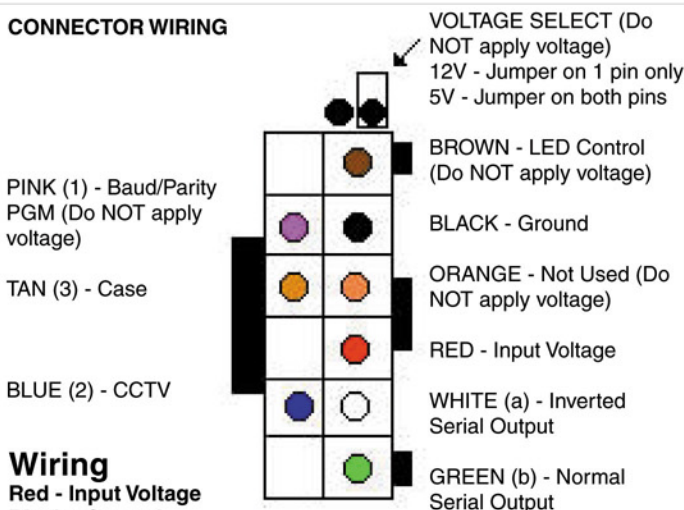
     Examples: 31 --> 1200 baud, odd parity
                70 --> 19200 baud, no parity
You should hear 3 rapid audible beeps and see both LED's extinguish. At this point the Keypad will appear dead and not accept any entries. (If the wrong key is pressed during the programming sequence, pressing the * key will clear the entry. Your will then hear 4 rapid beeps and both LED's will flash at the same rate. The Keypad will generate an error tone if you enter an invalid number.) Disconnect power to the RED wire and disconnect the PINK wire from the BLACK wire. Reapply voltage. This procedure may be repeated to change the Baud Rate and Parity option. You must enter both digits even if you wish to change only one setting. Factory default is 9600 baud, no parity.

(2) BLUE - Pressing any position on the Keypad will generate a 30 second 0.25 amp intermittent duty grounding output.

(3) TAN - Case Ground at the Keypad installation point, not through the cable.

NOTE: The Thinline 2x6 Keypad has two LED's that are used for illumination. To turn on illumination, cut the wire loop by the connector. Activating illumination will draw an additional 20 mA.