



KeyAT-5

RS-232 to USB Keyboard/Mouse Adapter Scanner & Scale Interface Application Note

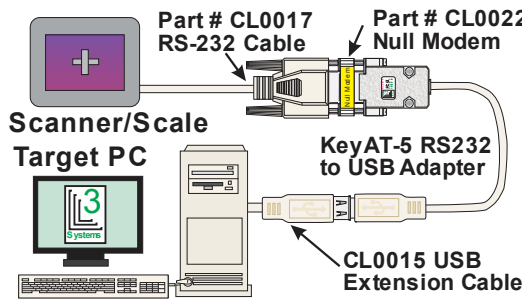
The KeyAT-5 Keyboard Port Adapter is commonly used to connect scanners and scales to PC's or Point-of-Sale equipment emulating keyboard input.

CONNECTING

The KeyAT-5's RS232 connector is a "DCE" type, meaning it will connect directly to a PC's RS-232 connector. Scanners and scales usually are also "DCE" type connectors, and thus require a "cross cable" or "null modem adapter" to connect to a KeyAT-5. Electrically, this means that Pins 2 (Rx) and 3 (Tx) need to be swapped. L3 Systems carries a Null modem adapter, part number CL0022, that can be used for this.

For longer runs, L3 Systems offers both RS232 extension cables (Part # CL0017) and USB extension cables (Part # CL0015).

TYPICAL SCANNER/SCALE CONNECTION



SCANNER/SCALE CONFIGURATION

To match the KeyAT-5 Serial parameters, the scanner serial port should be configured to:

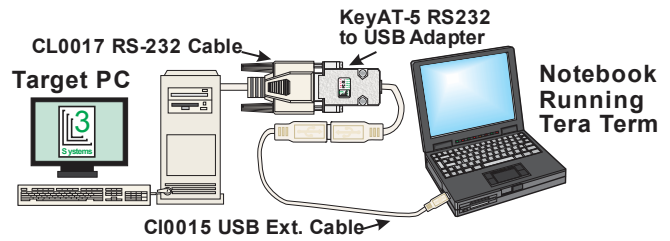
9600 Baud – 8 Data Bits – 1 Stop Bit – No Parity

The scanner should also be configured to send a <CR> (Carriage Return or Enter character), (hex 0D), at the end of the data string.

Some scanners and scales send <CR> and <LF> characters at the end of the string and this cannot be changed. If so, you can configure the KeyAT-5 to ignore the <LF> (hex 0A) character:

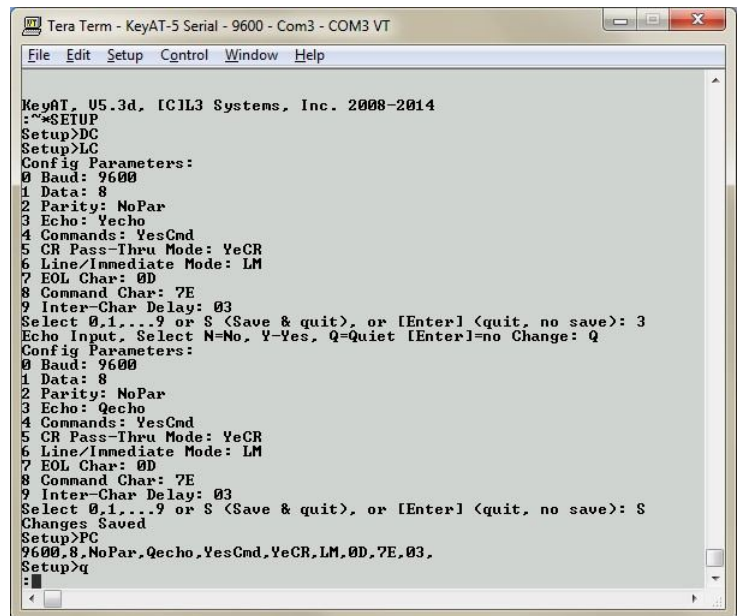
```
:~*SETUP<Enter>
Setup>LK0A=<Enter>
Setup>PK<Enter>
AS Codes
-----
0A
Setup>q<Enter>
:
```

KEYAT-5 CONFIGURATION



To configure the KeyAT-5, you need to connect it to a PC with a serial port as shown above with the USB plugged into a USB port to power the KeyAT-5. The PC needs to run a Terminal emulator such as Tera Term. (Available at www.L3sys.com/files)

The KeyAT-5 may need to be configured to pass through the <CR> or <Enter> character at the end of the scan string so the application can accept the scale/scanner data. To do this you need to put the KeyAT-5 in "CR Pass-Thru Mode". Also, you may need to put the KeyAT-5 into "Quiet Mode" so it doesn't echo any characters to the scanner. Below shows KeyAT-5 put in setup mode, and enabling CR Pass-Thru mode and Quiet Modes:



Note that the KeyAT-5 needs to cycle power (unplug/plug USB connection) before the configuration changes take effect. Also, you can order the KeyAT-5 preconfigured for these settings.