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# Model 156A/1 Serial Commands

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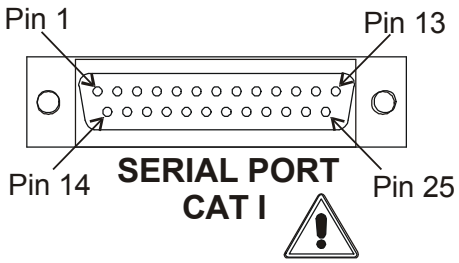


## D25 Serial Pin Readouts

| D-Type 25-Pin No. | Abbreviation | Full Name |
|---|---|---|
| Pin 2 | TD | Transmit Data |
| Pin 3 | RD | Receive Data |
| Pin 4 | RTS | Request To Send |
| Pin 5 | CTS | Clear To Send |
| Pin 6 | DSR | Data Set Ready |
| Pin 7 | SG | Signal Ground |
| Pin 8 | CD | Carrier Detect |
| Pin 20 | DTR | Data Terminal Ready |
| Pin 22 | RI | Ring Indicator |

The commands sent over the serial port to the Model 156A/1 are of a form of either a 3 or 6 character string. The characters are always lower case and will always garner a 2 character response from the Model 156A/1. The setup of the serial port is as follows:

8 data bits
1 stop bit
No parity
57600 baud rate

The responses from the Model 156A/1 are always marked by one of two responses. They are an “OK” or “er”. The “OK” response indicates that the command was understood, data might follow, in which case certain commands will respond with data followed by an “OK” statement. What follows is a summary of the commands.

# Model 156A/1 Serial Commands (cont.)

| Command | Description | Model 156A/1 Response |
|---|---|---|
| tx1 | Start to transmit data | "OK(high byte)(low byte) (high byte)(low byte)….." Data starts to come, in a binary fashion (16 bit signed Integer), after receipt of "OK" |
| tx0 | Stop data transmission | "OK" |
| rst | Resets Model 156A/1 | "OK" |
| f12345 | Fast Data Transmission | This is the command to enter the "Fast Data" collection mode. Bytes "1234" are the number of data points to gather, in binary fashion(32 bit unsigned interger). The byte "5" is the timing byte.<br>A binary 0=10ms between data points<br>A binary 1=3.3ms between data points<br>A binary 2=1.66ms between data points<br>A binary 3=3.33ms between data points<br>A binary 4=833us between data points<br>An "OK" will be sent after receipt of command<br>And again after all of the data is transmitted.<br>For example, "OK(high byte)(low byte)…….<br>(high byte)(low byte)OK". |
| gtv | Get Start and Stop voltages | This command responds with an "OK" and then with 4 bytes and then with "OK". The first two bytes returned are the start voltage (high byte, low byte) then the next 2 bytes are the stop voltage (high byte, low byte). |
| vt1234 | Set start and stop voltages | This command responds with an "OK". Btyes "1" and "2" set the start voltage with byte "1" the binary high byte and bye "2" the binary low byte. Btyes "3" and "4" set the start voltage with byte "3" the binary high byte and bye "4" the binary low byte. |
| md1 | Set the operating mode | This command responds with an "OK". Byte "1" is a Binary number that sets the mode.<br>A binary 0= Float Mode<br>A binary 1= +Decay Mode<br>A binary 2= -Decay Mode<br>A binary 3= Manual Mode |