

Validyne P61 Serial Protocol

Assign USB Address

Host Command: >99123456XX

99 = Broadcast for Address Code (all units listen)

123456 = Six Digit P61 Serial Number

XX = Address Assigned, 01 to 98

P61 Response: <XX123456

123456 = Six Digit Unit Serial Number

XX = Address Assigned, 01 to 98

Host Commands

>XXC

Where: > Command Header (ASCII 3e)
XX 2 digit USB address code, 0 to 99
M Command Code
Z = Set P61 Zero - if pressure reading within 10% of Zero
S = Set P61 Span - if pressure reading within 10% of FS
G = Ping
C=Calibration & Model Data
T = Temp Reading Request
P = Pressure Reading Request
E = Enable Data Output at a user defined period. Allowable Range is
200msec to 6000msec.
D = Disable Data output

P61 Responses

<XXM?*value*U

Where: < Data Response Header (ASCII 3c)
XX 2 digit address code, 0 to 99
M Command Identifier
Z = Set P61 Zero
S = Set P61 Span
G = Ping
C = Calibration & Model Data
? = Command Fails
* = Marker in string where value starts when value is returned
U = Units F, I or P
T = Temperature Reading, Deg F
Format: 0.0 F to 160.0 F

Examples:

Host String: >01Z (set zero at P61 USB address 01)

P61 Reply: <01Z (set zero successful)
<01Z? (set zero not successful)

Host String: >01S (set span)

P61 Reply: <01S (set span successful)
<01S? (Set span unsuccessful)

Host String: >01T (get temp reading)

P61 Reply: <01T*79.3°F (temp of 79.3F returned)

Host String: >01T (get temp reading)

P61 Reply: <01T? (Temp reading off scale or not available)

Host String: >01P (get pressure reading)

P61 Reply: <01P*172.3*P (pressure reading of 172.3 PSID returned)

Host String: >01P (get pressure reading)

P61 Reply: <01P*15.33*I (pressure reading of 15.33 In H2O returned)

Host String: >01P (get pressure reading)

P61 Reply: <01P? (Reading off scale)

Host String: >01E200 (Enable Data output every 200msec)

P61 Reply: <01P*15.33*I (pressure reading of 15.33 In H2O returned)

Host String: >01D (Disable Data output)

P61 Reply: <01D (Data output disabled)

Host String: >01C (get calibration and model data)

P61 Reply: <01C*P61D5N932S4A*123456*06-26-10*2.000P

P61D-5-N-9-32-S-4-A = Model Number

123456 = serial number

06-26-10 = calibration date

2.000P = calibrated FS, psid