DPi1701
Temperature & Process Input
Graphic Display Panel Meter
and Data Logger
with Wireless Option

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Figure 1. View of DPi1701 Back Panel With USB & Wireless Options

Figure 2. Power & Mechanical Relay Output Connections

Fuse 1 = 100 mA(T)
Fuse 2 = 3 A(T)

Figure 3. Different Input Type Connections
**Figure 4. RS232 Connections**

<table>
<thead>
<tr>
<th>IN</th>
<th>RX</th>
<th>TX</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GND</td>
<td>RX</td>
</tr>
<tr>
<td>2</td>
<td>TX</td>
<td>RX</td>
</tr>
</tbody>
</table>

**EXCITATION & ANALOG OUTPUT ARE NOT AVAILABLE**

**Figure 5. Excitation Voltage & Analog Output Connections**

**Figure 6. Configuration Menu Flow Chart**

**NOTE:** CONFIG MENU 8 SHOWS UP ONLY WHEN INPUT TYPE IS SELECTED AS WIRELESS.

**CONFIG. MENU 8**
- TRANS ADDR: 1
- RECEIVER ADDR: 0
- TIME OUT: 6
- WIRELESS CHANNEL: 12
- WIRELESS NETWORK ID: 13106

**CONFIG. MENU 7**
- START LOGGING: KEY PRESS
- STOP LOGGING: KEY PRESS

**CONFIG. MENU 6**
- CURRENT TIME: 03:53:45 PM
- CURRENT DATE: 01/03/2012
- TIME FORMAT: 12 Hour MM/DD/YYYY
- LOG MODE: STOP WHEN FULL

**CONFIG. MENU 5**
- DISPLAY ZERO ADJUST: 10
- DISPLAY SPAN ADJUST: 0
- OUTPUT TYPE: 0-5V
- DISPLAY MODE: NORMAL 568.3°F

**CONFIG. MENU 4 [ALARM 2]**
- SET POINT: 700.0
- STATUS: ENABLED
- DEAD BAND: 10.0
- LATCH HIGH

**CONFIG. MENU 3 [ALARM 1]**
- SET POINT: 450.0
- STATUS: ENABLED
- DEAD BAND: 10.0
- LATCH LOW

**CONFIG. MENU 2**
- CATEGORY: Temperature
- E. UNIT: °F
- DECIMAL POINT: xxx.x
- MIN. DISPLAY VALUE: 148.0
- MAX. DISPLAY VALUE: 1400.0

**CONFIG. MENU 1**
- LINE GRAPH TIME SPEED: 1 sec
- LINE/BAR GRAPH TOP VALUE: 800.0
- LINE/BAR GRAPH BOTTOM VALUE: 300.0
- INPUT TYPE: TC-J

**REAL TIME (RUN MODE)**

- INPUT: TC-J
- ALARM 1: ON
- ALARM 2: OFF

- CURRENT DATE: 01/03/2012
- TIME FORMAT: 12 Hour MM/DD/YYYY
- LOG MODE: STOP WHEN FULL

- CURRENT TIME: 03:53:45 PM

**ENTER BUTTON: SAVE SELECTION AND RUN THROUGH ENTRIES OF A CONFIG. SUB-MENU.**

**INCREMENT PARAMETER VALUE/SELECTION OF AN ENTRY.**

**DECREMENT PARAMETER VALUE/SELECTION OF AN ENTRY.**
Figure 7. Display Screen Flow Chart

Figure 8. MAX/MIN Flow Chart

Figure 9. Lock/Unlock Flow Chart
Figure 10. Data Logging Screen Flow Chart

SPECIFICATIONS SUMMARY

GENERAL
Thermocouple Accuracy
- Type J, Type K, Type E: 0.5°C (0.9°F)
- Type R & S: 1°C (1.8°F) or 0.5% of full scale

Thermocouple Range
- Type J: -100 to 760°C (-148 to 1400°F)
- Type K: -100 to 1260°C (-148 to 2300°F)
- Type E: -200 to 849°C (-328 to 1560°F)
- Type T: -200 to 400°C (-328 to 752°F)
- Type R & S: 100 to 1760°C (212 to 3200°F)

Thermocouple Warm up Period: 45 minutes
Thermocouple Zero Drift: 0.06°C/°C
Open Thermocouple Detection: Up scale
Thermocouple Lead Resistance: 100 ohms max.

RTD:
- 100 ohms Platinum, 2 or 3 wire, 0.00385 curve
- RTD Accuracy: 0.5°C (0.9°F)
- RTD Range: -200 to 850°C (-328 to 1562°F)
- Open RTD Detection: Up scale

Process (Voltage or current)
Input Accuracy: 0.1% of Rdg
Voltage Input Range: 0 to 10 Vdc
Current Input Range: 0 to 20 mA and 4 to 20 mA
Sampling Rate: 4 samples per second

General Power: 90/240 Vac +/-10%, 50-400 Hz
Operating Conditions: 0 to 50°C (32 to 122°F), 90% RH non-condensing

Protection: NEMA-1/Type 1 Front bezel
Dimensions: 48H x 96W x 118mm D (1.89 x 3.78 x 4.65")
Panel Cutout: 45H x 92mm W (1.772 x 3.622")
Weight: 295 g (0.65 lbs)
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**WARNING**: These products are not designed for use in, and should not be used for, human applications.

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2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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