

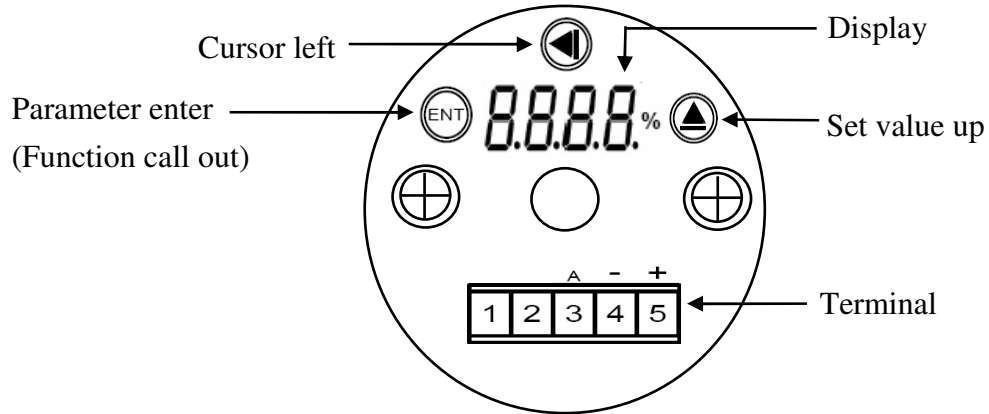
# HEAD-MOUNTED TWO-WIRE POTENTIOMETER TRANSMITTER

TWP series

## ■ Features

- ⊙ Accuracy 0.1% F.S
- ⊙ Wide input ranges form  $100\Omega$  to  $50K\Omega$  (3-wire)
- ⊙ Burnout protection function. upscale the output current limit of approximately  $\leq 20.32mA$
- ⊙ Field-range able supper voltage from 10 to 30V
- ⊙ RL(max.)=(Vsupply-9V)/20mA.up to 750 ohms at 24VDC
- ⊙ Low cost and high stability

## ■ Name Of Parts



Key Introduce		Operation Manual	
⊕ Key Function		1.In normal display the key function is call out parameter setting page 2.In parameter setting page the key function is data enter and go to next page	
◀ Key Function		1.Into parameter setting page. The parameter mark&data is alternate display. If need modify data can press shift key into setting procedure. The display is lock parameter data this time must let off key about 0.2 sec. press again. the cursor(twinkle express)is cycle moving left/right. (key response about 0.2 sec)	
▲ Key Function		1.In normal display press ▲ key about 10s. display auto zero (maximum auto zero counts 100) 2.Into parameter setting page the parameter mark&data is alternate display. If need modify data can press up key into setting procedure. The display is lock parameter data this time must let off key about 0.2 sec. press again. the parameter data will increment. (key response about 0.2 sec)	
No Key in anything		In setting page no key in anything about 2 minutes. return normal display	
Step	Parameter Mark Description	Parameter Mark	Operation Manual
1	Normal display	1 2 3 4	Press ⊕/FUNC key into P.COD setting page
1-1	P.COD(Pass code input page) Default=0	P. □ □ □ □	1.Key in 4 digit pass code with ◀&▲key 2.Press ⊕key the pass code is right into DP setting page otherwise return normal display
		□ □ □ □	
1-2	DP(Decimal Point) Default=0	□ P	1.Decide decimal point position with ▲ key(0~3) 2.Press ⊕key enter data and into DSPL setting page
		□	
1-3	DSPL(Display Low Scale) Default=0	□ 5 P L	1.Decide display low scale with ◀&▲key (-1999~9999) 2.Press ⊕key enter data and into DSPH setting page Note:Default value is 0000 if need setting value into negative, press ◀ key to most significant digit twinkle, press ▲ key to display value 9000,then display value -1000 while press ▲ key again
		□ □ □ □	
1-4	DSPH(Display High Scale) Default=9999	□ 5 P H	1.Decide display high scale with ◀&▲key (-1999~9999) 2.Press ⊕key enter data and into ANLO setting page Note: Default value is 9999 if need setting value into negative, press ◀ key to most significant digit twinkle,then display value -1999 while press ▲ key
		9 9 9 9	

1-5	ANLO(Analog Output Zero-According to Display) Default=0	<p>Ⓜ Ⓝ Ⓛ 0</p> <p>0 0 0 0</p>	<p>1.Decide ANLO with ◀ &amp; ▲ key (-1999~9999)</p> <p>2.Press Ⓜ key enter data and into ANHI setting page</p> <p>Note1:Output current will 4mA at display value 100,if set ANLO 100(normal output is 4~20mA)</p> <p>Note2:Default value is 0000 if need setting value into negative, press ◀ key to most significant digit twinkle, press ▲ key to display value 9000,then display value -1000 while press ▲ key again</p>
1-6	ANHI(Analog Output Span-According to Display ) Default=9999	<p>Ⓜ Ⓝ Ⓜ Ⓜ</p> <p>9 9 9 9</p>	<p>1.Decide ANHI with ◀ &amp; ▲ key(-1999~9999)</p> <p>2.Press Ⓜ key enter data and into AZERO setting page</p> <p>Note1:Output current will 20mA at display value 2000,if set ANHI 2000(normal output is 4~20mA)</p> <p>Note2:Default value is 9999 if need setting value into negative, press ◀ key to most significant digit twinkle,then display value -1999 while press ▲ key</p>
1-7	AZERO(Analog Output Zero Adjustment page) Default=0	<p>Ⓜ - 0</p> <p>0 0 0 0</p>	<p>1.Decide AZERO with ◀ &amp; ▲ key(±99)</p> <p>2.Press Ⓜ key enter data and into ASPAN setting page</p> <p>Note1:Adjust AZERO value while minimum output error</p> <p>Note2:Default value is 0000 if need setting value into negative, press ◀ key to most significant digit twinkle, press ▲ key to display value 90,then display value -90 while press ▲ key again</p>
1-8	ASPAN(Analog Output Span Adjustment page) Default=0	<p>Ⓜ - 0</p> <p>0 0 0 0</p>	<p>1.Decide ASPAN with ◀ &amp; ▲ key (±199)</p> <p>2.Press Ⓜ key enter data and into DZERO setting page</p> <p>Note1:Adjust ASPAN value while maximum output error</p> <p>Note2:Default value is 0000 if need setting value into negative, press ◀ key to most significant digit twinkle, press ▲ key to display value 100,then display value -100 while press ▲ key again</p>
1-9	DZERO(Display Zero Adjust ) Default=0	<p>0 - 0</p> <p>0 0 0 0</p>	<p>1.Adjustment display zero with ◀ &amp; ▲ key</p> <p>2.Press Ⓜ key enter data and into DSPAN adjustment page</p> <p>Note1:Adjust DZERO value while minimum display value error</p> <p>Note2:Display value will increase a bit while press ◀ key and decrease a bit while press ▲ key</p>
1-10	DSPAN(Display Span Adjust ) Default=0	<p>0 - 0</p> <p>0 0 0 0</p>	<p>1.Adjustment display span with ◀ &amp; ▲ key</p> <p>2.Press Ⓜ key enter data and into CODE adjustment page</p> <p>Note1:Adjust DSPAN value while maximum display value error</p> <p>Note2:Display value will increase a bit while press ◀ key and decrease a bit while press ▲ key</p>
1-11	CODE(Pass Code) Default=0	<p>0 0 0 0</p> <p>0 0 0 0</p>	<p>1.Decide Pass code with ◀ &amp; ▲ key (0~9999)</p> <p>2.Press Ⓜ key enter data and return normal display</p>
Appendix	Error Mark Description	Error Mark	Analyze & Description
1	Display over error detect	0 0 F L	Display over range
2	A/D Converter error detect	Ⓜ 0 E 0	Inside circuit damage
3	EEPROM error detect	<p>E - 0 0</p> <p>0 0</p> <p>0 E 0</p>	<p>1.External interference when EEPROM read/write</p> <p>2.EEPROM write over 100 million times(guarantee 10 years)</p> <p>Please power reset if still display E-00 doing following step:</p> <p>1.E-00 &amp; No alternate display for inquire reset EEPROM</p> <p>2.Decide Yes with ▲ key. Press Ⓜ key return normal display</p> <p>EEPROM was reset please follow step 1 set again</p>