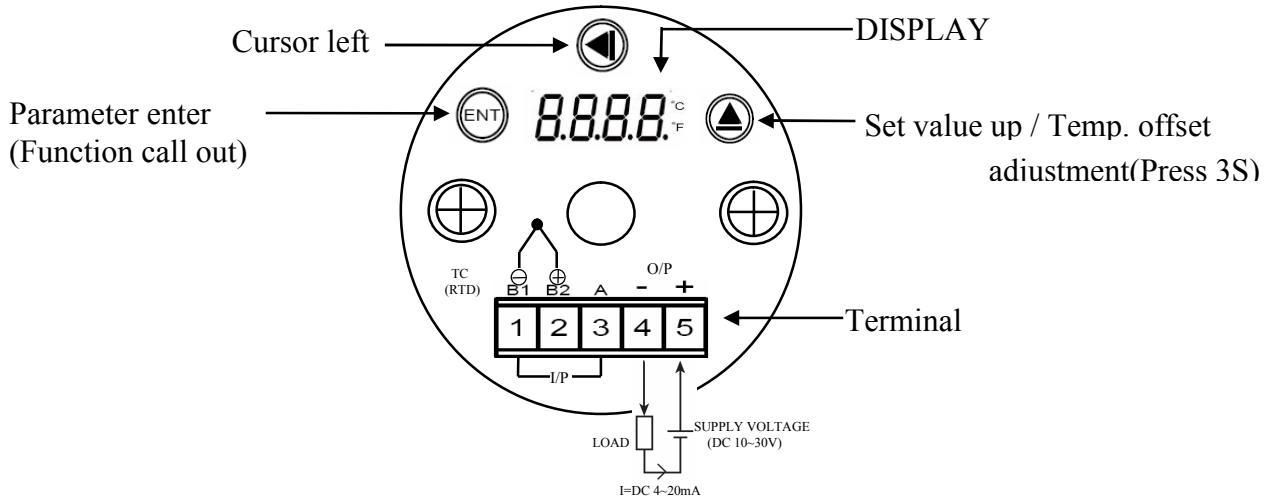


AXE HEAD-MOUNTED TWO-WIRE TEMPERATURE TRANSMITTER TW series

■ Features

- ⊙ Accuracy 0.1% F.S(Pt-100). 0.2% F.S±0.5°C (CJC)(TC) ⊙ Field-rangeable supply voltage from 10 to 30V
- ⊙ Input range(-1999~9999)/Display unit(°C, °F) can be modify ⊙ RL(max.)=(Vsupply-9V)/20mA. up to 750 ohms at 24VDC
- ⊙ Burnout protection function upscale the output current limit ⊙ Low cost and high stability
- of approximately $\leq 20.32\text{mA}$

■ 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, The key function is call out temp. offset adjustment page 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. C O D □ □ □ □	1. Key in 4 digit pass code with ◀ & ▲ key 2. Press ⊕ key the pass code is right into TYPE setting page otherwise return normal display
1-2	TYPE(Tc Type setting page) Default = P	T C P E P	1. Decide Tc type with ▲ key (PT-100/B/E/J/K/R/S/T) 2. Press ⊕ key enter data and into DP setting page
1-3	DP(Decimal Point) Default=0	□ P □	1. Decide decimal point position with ▲ key (0~1) 2. Press ⊕ key enter data and into UNIT setting page
1-4	UNIT(Temp. Unit setting page)Default = °C	U N I T □ □	1. Decide Temp. Unit with ▲ key (°C/°F) 2. Press ⊕ key enter data and into ANLO setting page
1-5	ANLO(A/O Zero According to Display setting page) Default=0	R A N L O □ □ □ □	1. Decide ANLO with ◀ & ▲ key (-1999~9999) 2. Press ⊕ key enter data and into ANHI setting page Note1: Output current will 4mA at display value 100, if set ANLO 100(normal output is 4~20mA) 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

1-6	ANHI(A/O Span According to Display setting page) Default=9999	R n H , 9 9 9 9	1. Decide ANHI with ◀ & ▶ key (-1999~9999) 2. Press Ⓜ key enter data and into AZERO setting page Note1:Output current will 20mA at display value 2000,if set ANHI 2000(normal output is 4~20mA) 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
1-7	AZERO(Analog Output Zero Adjustment page) Default=0	R - P 0 0 0 0	1.Adjustment analog output zero with ◀ & ▶ key(±199) 2.Press Ⓜ key enter data and into ASPAN adjustment page Note1:Adjust AZERO value while minimum output error 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
1-8	ASPAN(Analog Output Span Adjustment page) Default=0	R - S 0 0 0 0	1.Adjustment analog output span with ◀ & ▶ key (±499) 2.Press Ⓜ key enter data and into DZERO adjustment page Note1:Adjust ASPAN value while maximum output error Note2:Default value is 0000 if need setting value into negative, press ◀ key to most significant digit twinkle, press ▶ key to display value 400,then display value -400 while press ▶ key again
1-9	DZERO(Display Zero Adjust) Default=0	d - P 0 0 0 0	1.Adjustment display zero with ◀ & ▶ key 2.Press Ⓜ key enter data and into DSPAN adjustment page Note1:Adjust DZERO value while minimum display value error Note2:Display value will increase a bit while press ◀ key (+)and decrease a bit while press ▶ key(-)
1-10	DSPAN(Display Span Adjust) Default=0	d - S 0 0 0 0	1.Adjustment display span with ◀ & ▶ key 2.Press Ⓜ key enter data and into CODE adjustment page Note1:Adjust DSPAN value while maximum display value error Note2:Display value will increase a bit while press ◀ key (+)and decrease a bit while press ▶ key(-)
1-11	CODE(Pass Code) Default=0	E o d E 0 0 0 0	1. Decide pass code with ◀ & ▶ key (0~9999) 2.Press Ⓜ key enter data and return normal display
Step	Parameter Mark Description	Parameter Mark	Operation Manual
2	Normal display	1 2 3 4	Press ▶ key,into Temp. offset adjustment page
2-1	OFST(Temp. Offset) Default=0	o F S E 0 0 0 0	1.Decide Temp. offset with ◀ & ▶ key(±99.9) 2.Press Ⓜ key enter data and return normal display. Note1:Default value is 000.0 if need setting value into negative, press ◀ key to most significant digit twinkle, press ▶ key to display value 90.0,then display value -90.0 while press ▶ key again
Appendix	Error Mark Description	Error Mark	Analyze & Description
1	Temp. over error detect	d o F L	(T.C+CJC) Temp. over range (PT-100/B/E/J/K/R/S/T)
2	Sensor burnout error detect	o P E n	T.C or CJC sensor burnout
3	A/D Converter error detect	R d E r	Inside ADC circuit damage
4	EEPROM error detect	E - 0 0 n o 4 E S	1.External interference when EEPROM read/write 2.EEPROM write over 1 million times(guarantee 10 years) Please power reset if still display E-00 doing following step: 1.E-00 & No alternate display for inquire reset EEPROM 2.Decide Yes with ▶ key. Press Ⓜ key return normal display EEPROM was reset please follow step 1/2 set again