

NOTES :

GENERAL

OUTPUT TO THE INSTRUMENT FROM THE PREAMP IS UNITY GAIN, INVERTED POLARITY.

WHEN A COMBINATION ELECTRODE IS USED, REFERENCE CONNECTION IS MADE THROUGH THE BNC CONNECTOR.

IF A SEPARATE REFERENCE CELL IS USED, CONNECT IT TO TERMINAL 5 OF THE PREAMP, AND LEAVE THE WIRE IN PLACE FROM 5 TO **SC**.

TEMPERATURE COMPENSATION

NORMAL 7082 TC IS ACCOMPLISHED WITH A NEGATIVE COEFFICIENT THERMISTOR THAT READS 8.5KΩ AT 25°C, CONNECTED AS SHOWN.

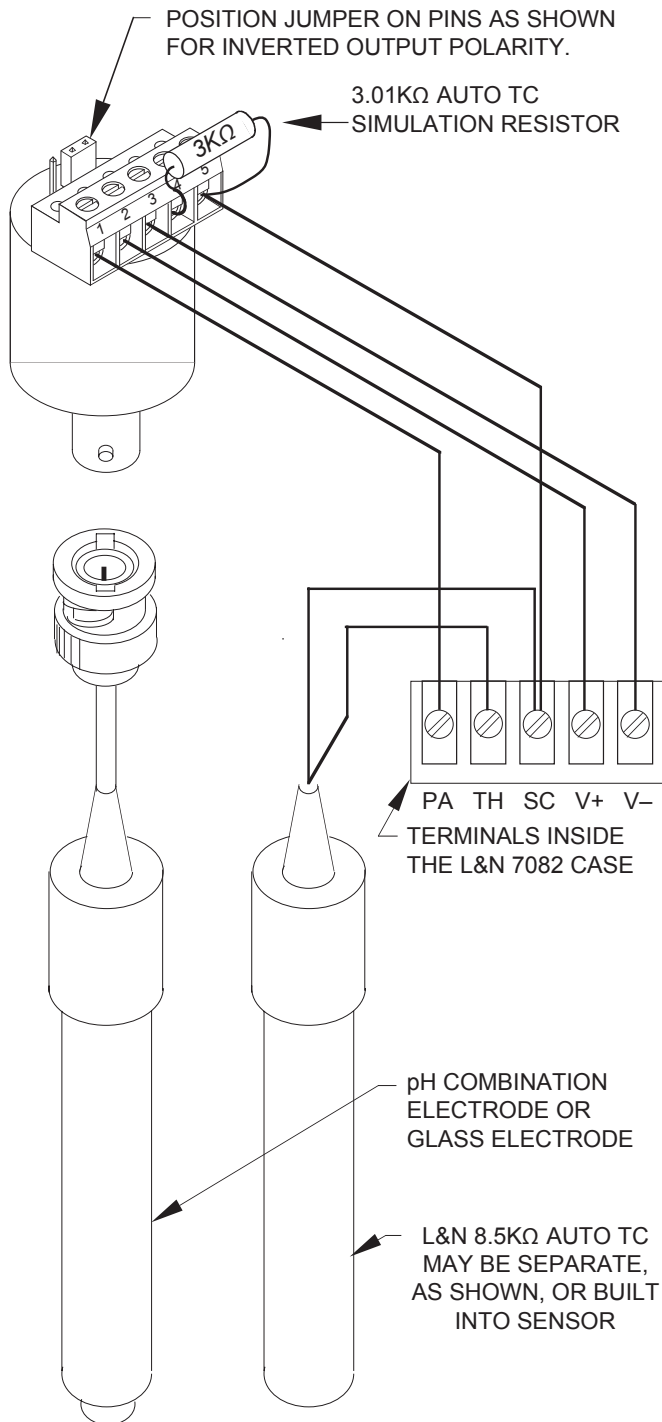
THE V1 AMPLIFIER CAN PERFORM AUTOMATIC COMPENSATION USING A 3KΩ AT 25°C BALCO ELEMENT, WITH A SLOPE OF +13.5Ω/°C. HOWEVER, IT IS PREFERABLE TO USE THE 8.5KΩ ELEMENT TO ENABLE THE 7082'S FULL CONTROL CAPABILITIES, SO THE AMPLIFIER SHIPS WITH A 3.01KΩ RESISTOR BETWEEN TERMINALS 4 AND 5. IF YOU WISH TO USE A 3KΩ BALCO ELEMENT, THEN THE 3.01KΩ RESISTOR MUST BE REMOVED, AND THE BALCO CONNECTED IN ITS PLACE. THEN PLACE AN 8.5KΩ RESISTOR ACROSS **SC** AND **TH** TERMINALS IN THE 7082 INSTRUMENT CASE.

ONLY ONE AUTO TC CAN BE USED AT ONE TIME. REPLACE THE UNUSED ONE WITH A FIXED RESISTOR HAVING THE SAME VALUE AS THE UNUSED ELEMENT AT 25°C.


SHIELDING

SHIELDED CABLE FROM PREAMP TO INSTRUMENT IS OPTIONAL. IF A SHIELD IS USED, CONNECT IT EITHER TO EARTH GROUND OR **SC** AT ONE POINT ONLY. IF CONNECTED TO **SC**, MAKE SURE THAT THE SHIELD DOES NOT CONTACT METAL PIPING.

DON'T LET ANY OF THE LEADS, OR THE BNC CONNECTOR TOUCH METAL PIPING, CONDUIT, OR OTHER EARTH GROUNDS. THIS WILL CREATE A "GROUND LOOP" AND CAUSE VERY UNSTABLE READINGS.



NOTES UNLESS OTHERWISE SPECIFIED:

		11751 Markon Drive	
		Garden Grove, CA. 92841 USA	
DRAWN BOB HUNT		TITLE V1 PREAMPLIFIER WIRING	
CHECKED		L&N SERIES 7082-10, 11, 12	
APPROVED	SCALE NONE	DRAWING NO.	REV.
	SHEET 1 OF 1	V1-7082	A
		phone: 714-895-4344 fax: 714-894-4839	