

## 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 7081 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 7081'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 T TERMINALS IN THE 7081 INSTRUMENT CASE.

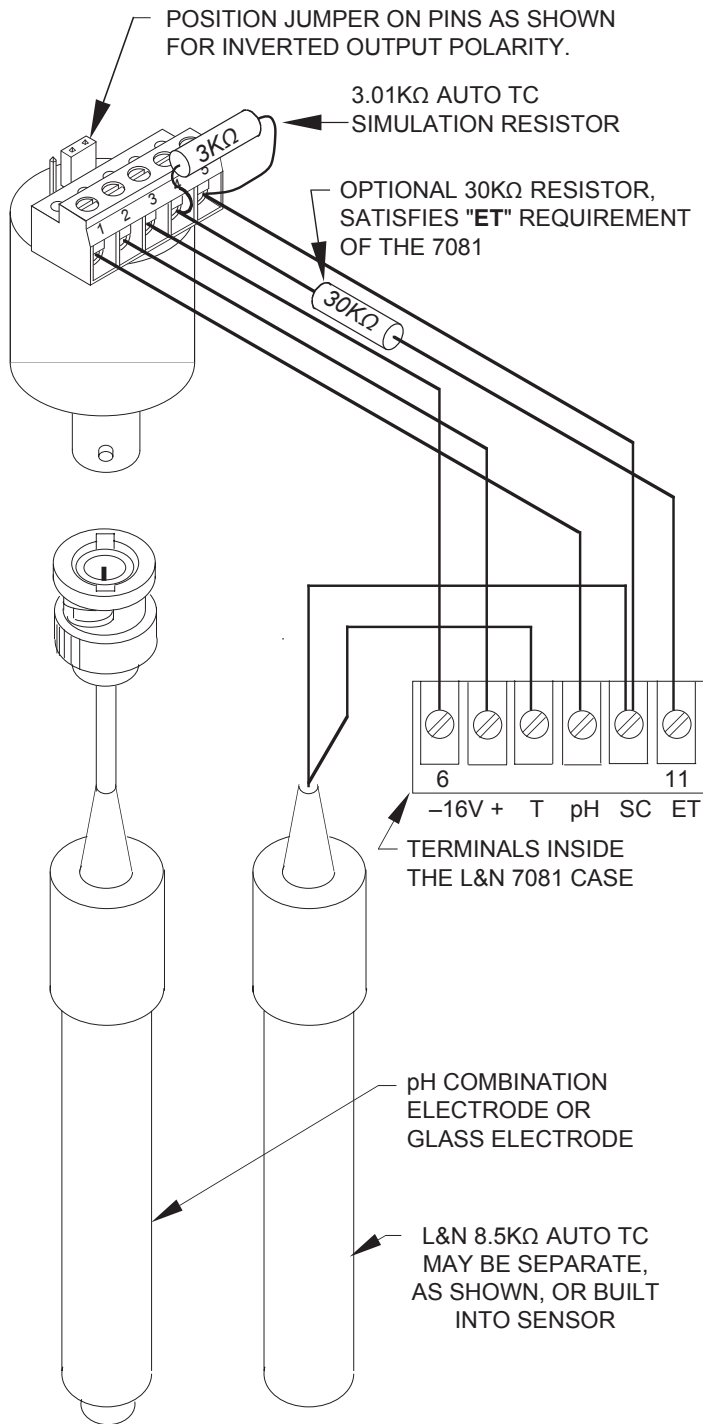
ONLY ONE AUTO TC CAN BE USED AT ONE TIME. REPLACE THE UNUSED ONE WITH A FIXED RESISTOR HAVING THE SAME VALUE AS THE UNUSED ELEMENT AT 25°C.

### ELECTRODE TEST FEATURE (ET)


THE 30KΩ RESISTOR SIMULATES THE "ELECTRODE TEST" FUNCTION OF THE INSTRUMENT. IT MAY BE NECESSARY TO ADJUST THIS VALUE SLIGHTLY.

### SHIELDING

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	
		phone: 714-895-4344 fax: 714-894-4839	
DRAWN	BOB HUNT	TITLE <b>V1 PREAMPLIFIER WIRING</b>	
CHECKED		<b>L&amp;N SERIES 7081</b>	
APPROVED		SCALE <b>NONE</b>	DRAWING NO.
		SHEET <b>1 OF 1</b>	<b>V1-7081</b>
			REV. <b>/</b>