

Probe Pal Signal Enhancer

Geotech Probe Pal Signal Enhancer

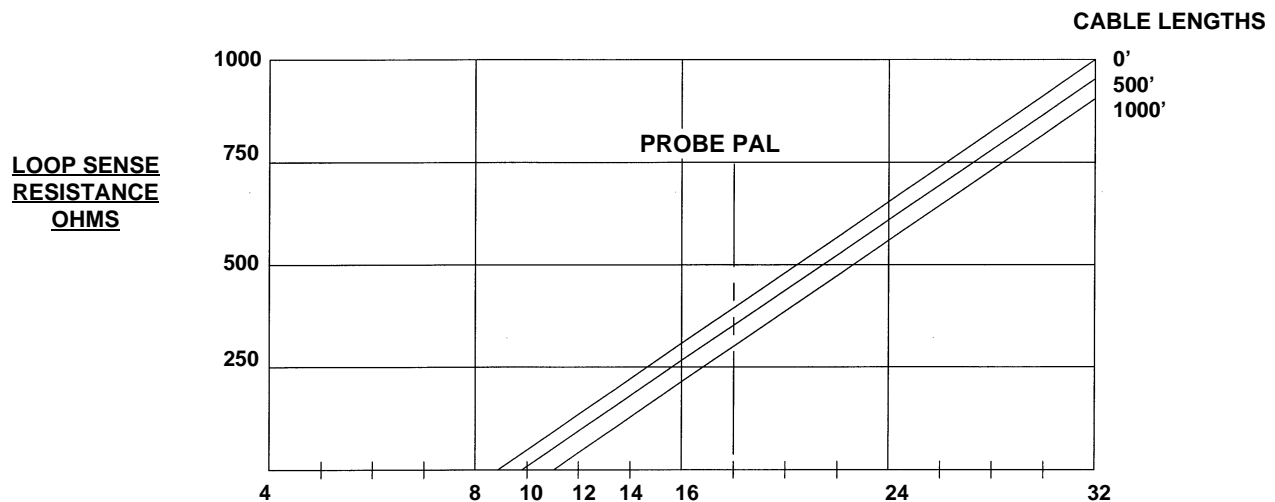
The Geotech Environmental PROBE PAL is an accessory that has been designed to aid in interfacing loop powered, 4-20mA sensors, specifically those that have long lead lengths, to controllers with insufficient sensor voltage. Adequate sensor voltage is essential for operating the current loop properly. A low pass filter is provided to reduce high frequency noise entering the controllers current input section. A reverse voltage protection circuit has also been incorporated into the PROBE PAL.

FEATURES

- Voltage Protection
- Voltage signal boost
- Reverse high frequency noise filter
- Designed to be intrinsically safe



GEOTECH PROBE PAL SIGNAL ENHANCER



SPECIFICATIONS

MAXIMUM RATINGS

Output Power	375	mW
Input Voltage	8 - 18	Vdc
Output Voltage	18	Vdc
Output Regulation	±5	%
Input Current	75	mA, typ @ 20 mA output
Input Power Maximum	1	W
Filter Capacitance	0.01	uF

ENVIRONMENTAL

Ambient Operating Temperature	-40 to 60°	C
Storage Temperature	-55 to 100°	C
Humidity	5 to 95%	Relative NC
Shock	TBD	
Vibration	TBD	

PHYSICAL

Size	2 x 2 x ¾	Inches
Weight	8	Ounces

Geotech Environmental Equipment, Inc.
 2650 East 40th Avenue • Denver, Colorado 80205
 (303) 320-4764 • (800) 833-7958 • FAX (303) 322-7242

PROBE PAL INSTALLATION & OPERATION

PROBE PAL CONNECTION

PROBE PAL can be connected in one of three different configurations depending on system requirements. It can be connected as a filter, a voltage step up function, or a combination of both features.

FILTER CONNECTION

1. Connect 4-20mA loop signal wire to one white wire on the PROBE PAL.
2. Connect other white wire to 4-20mA input on control.
3. Connect PROBE PAL black wire to current loop sensor supply common.

BOOST CONNECTION:

1. Connect PROBE PAL red wire to power supply or control sensor power supply (+).
2. Connect PROBE PAL black wire to current loop supply common.
3. Connect PROBE PAL output wire, brown, sensor positive (+) wire.

COMBINATION CONNECTION:

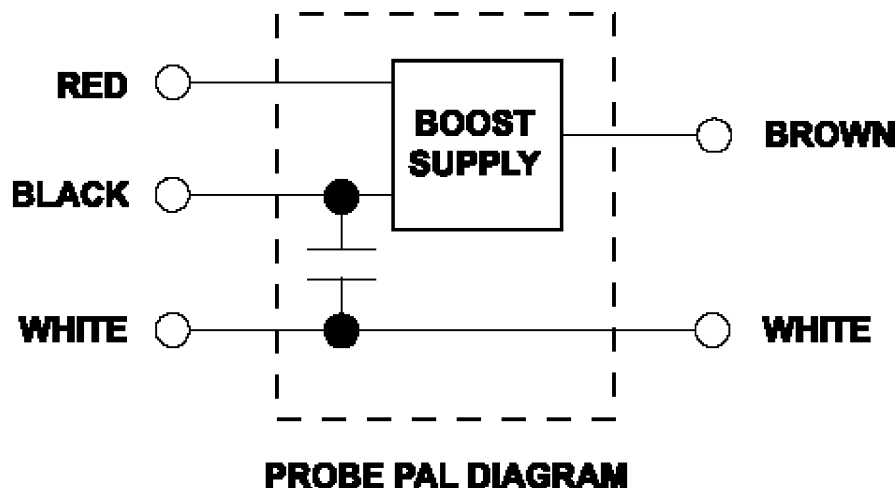
1. Connect PROBE PAL red wire to control or sensor power supply (+).
2. Connect PROBE PAL black wire to control or sensor supply (-) or common.
3. Connect PROBE PAL brown wire to sensor voltage output (+).
4. Connect PROBE PAL white wire to 4-20mA loop signal return from sensor.
5. Connect PROBE PAL white wire to 4-20mA loop signal to controller sensor input.

NOTE: Place PROBE PAL near controller for optimal results.

NOTE: When powering PROBE PAL with an off the shelf controllers sensor supply, make certain controllers sensor supply is not overloaded (see maximum ratings) when the loop current is 4-20 mA.

NOTE: For proper system operation, connect sensor ground wires to system chassis ground near controller or to a suitable ground lug. Make certain system wiring is in accordance with all local codes.

NOTE: CONSULT YOUR OPERATION/INSTALLATION MANUAL FOR THE REQUIREMENTS FOR THE SPECIFIC CONTROLLER BEING USED.



CALL GEOTECH TODAY (800) 833-7958

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 email: sales@geotechenv.com website: www.geotechenv.com