

OPERATING INSTRUCTIONS UNIVERSAL RECTIFIERS SOIL SELECTOR

1. Install the printed circuit adaptor boards onto the appropriate terminal posts on the soil resistivity instrument. These adaptor boards can remain on the instrument at all times and will not interfere with other uses of the instrument.
2. Extend the soil selector cable to full length in a straight line. A loop at the end of the cable, and an eyelet at the selector switch housing is provided to facilitate this operation.
3. Insert the cable connector from the selector switch/cable assembly into the adaptor board on the P2-C2 terminals.
4. Set one pin each in the ground adjacent to each of the contact points on the cable. Pins should be set in the ground to provide firm soil contact (usually 2" or 3"). Clip each pin to the adjacent cable contact by means of the clip assembly provided with the pin. All pins must be properly positioned and securely clipped to the cable before proceeding with any soil resistivity measurements. The contact points of the extended cable provide the proper pin spacing.
5. Set the six position switch (mounted in the housing at the end of the cable) for the desired depth. Operate the soil resistivity instrument in the normal manner as outlined in the instructions provided with the instrument. The resulting reading will be in ohms. To convert to ohms-cm³, multiply the reading by the factor below that corresponds to the six position switch setting employed during the measurement.

DEPTH	SIX POSITION DEPTH SWITCH SETTING	OHM X FACTOR = OHMS-CMS FACTOR
2.5 Feet	Position 1	478.7
5.0 Feet	Position 2	957.5
7.5 Feet	Position 3	1436
10.0 Feet	Position 4	1915
15.0 Feet	Position 5	2873
TEST	Position 6	INTERNAL 5 OHM TEST RESISTER

$$\text{Ohms-cm}^3 = \text{METER READING} \times \text{DISTANCE} \times 191.51$$

6. Calibration check: Switch position 6 is for checking the instrument only. Position 6 connects a 5 ohm resistor to the measuring circuit. In this position the instrument resistance measurement should indicate 5 ohms. Should the instrument not read this value, it should be checked for improper operation.