

Raychem

Aquilar

TT1000/3000

Calibration of TT-PTB-1000

1. The following method will allow confirmation and if necessary calibration of the adjustable parameters of the TraceTek PTB. The test requires the use of a DMM of 5½ digit resolution (or better) and a resistance decade box or known precision resistor of 5850ohm, +/- 1ohm.
2. Check the PTB 9V battery condition using the DMM. If the battery is less than 9.1 volts, replace it for the test.
3. Attach the alligator clip adapter to the PTB coiled cord.
4. Using the DMM on resistance scale, adjust the decade box to 5850ohm, +/- 1 ohm.
5. Attach the black alligator clip lead to one terminal and the yellow alligator clip lead to the other terminal of the decade box.
6. Set the DMM to the microamps scale and attach the red PTB alligator clip to the positive DMM lead and the negative DMM lead to the yellow PTB alligator clip.
7. Turn PTB power switch to the on position, cable switch to status and display switch to microamps position.
8. The current from the PTB should be $260 < i < 270 \mu\text{a}$ ($145 < i < 150 \mu\text{a}$ for metric setting). The current output is not adjustable. The PTB display should match the DMM (+/- 1 μa). If the PTB display does not match the DMM, adjust the PTB display using trimpot R18 located on the circuit board, which can be accessed after removing the 6 nuts on the bottom side of the circuit board.
9. Set the PTB display switch to distance. If the PTB does not read 1500 feet
10. +/- 1 ft., adjust the display using R4 located on the circuit board, which can be accessed after removing the 6 nuts on the bottom side of the circuit board.
If the PTB is set to metric scale and it does not read 457 meters, +/- 1 meter, adjust the display using R6.
11. Disconnect all alligator clips, set the cable switch to self test and the red cable break LED should light.
12. The cable break LED is not adjustable. If it is not functional, the PTB must be returned for service or replacement.